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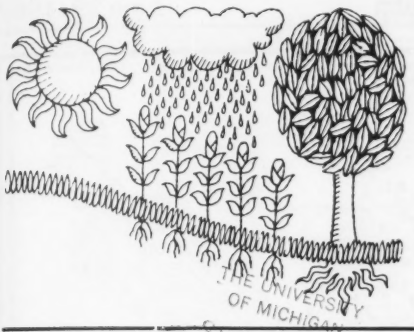

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service and World Agricultural Outlook Board

Volume 69, No. 26 WASHINGTON, D.C. June 29, 1982

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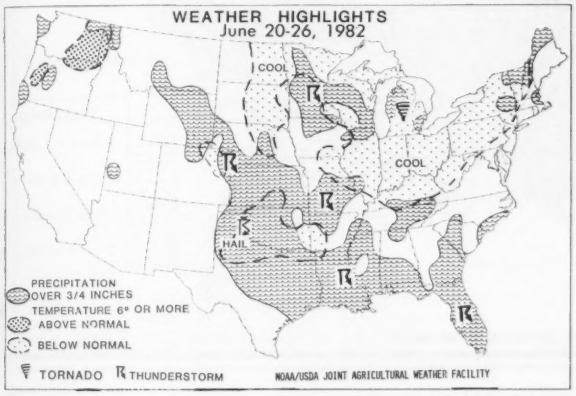
National Weather Summary

June 20-26



HIGHLIGHTS: Severe weather concentrated in north-central Texas, and the Panhandle, and central Oklahoma. Isolated points in this area reported large hail, but smaller hail was more widespread. Showers and thunderstorms produced heavy rain along the eastern slopes of the Rockies, through much of the Mississippi Valley, and across the South to Florida. Relatively cool weather over the winter wheat area of the southern and central Plains and over the Corn Belt retarded crop development.

SUNDAY...A storm center in Michigan trailed a cold front southwestward and produced thunderstorms from eastern New Mexico and western Texas through central Oklahoma to the Great Lakes region and the Northeast. Severe weather was isolated through this area, but New Mexico and Texas reported some hail and a few tornadoes. Late in the day, scattered thunderstorms developed from central Texas through Florida. A few thunderstorms dotted Oregon and northern California, the central Plateau, and northern Rockies.

MONDAY...Thunderstorms were scattered along a stationary front through the central Plains and the Great Lakes region, New York, and New England. Strong thunderstorms dumped golf ball-sized hail over parts of southern Nebraska and much of Kansas. Widespread, occasionally heavy thunderstorms covered the area from east-central Texas and southeastern Oklahoma, through the lower Mississippi Valley, to the Atlantic from Florida to North Carolina. A few showers and thundershowers were scattered over the central and northern Plateau and Rockies.

TUESDAY...Widespread showers and thunderstorms blanketed the area through the upslopes from southeastern Texas to western Montana. Severe weather produced baseball-sized hail at isolated points in the Texas Panhandle. Thunderstorms were scattered along most of the gulf coast and were widespread through the Appalachians and to the east coast. Warm weather covered the area in the West and across the South. Ninety-degree readings reached northward into Montana.

WEDNESDAY...The showers and thunderstorms spread through the central and southern Plains and continued over the east slopes of the Rockies. Some heavy storms hit the Big Bend area of Texas and central Oklahoma. Thunderstorms developed over the Dakotas and Minnesota and some severe weather was reported. Showers moved off the east coast but lingered in the northeastern and southeastern States. Temperatures cooled over the northern Rockies, but the warm weather reached into the Dakotas.

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PRICE INCREASE

AUG 25 1982

Due to increased printing costs and budgetary limitations, the price of the Weekly Weather and Crop Bulletin will be increased to $25 for domestic and $33 for foreign subscriptions on July 1, 1982.

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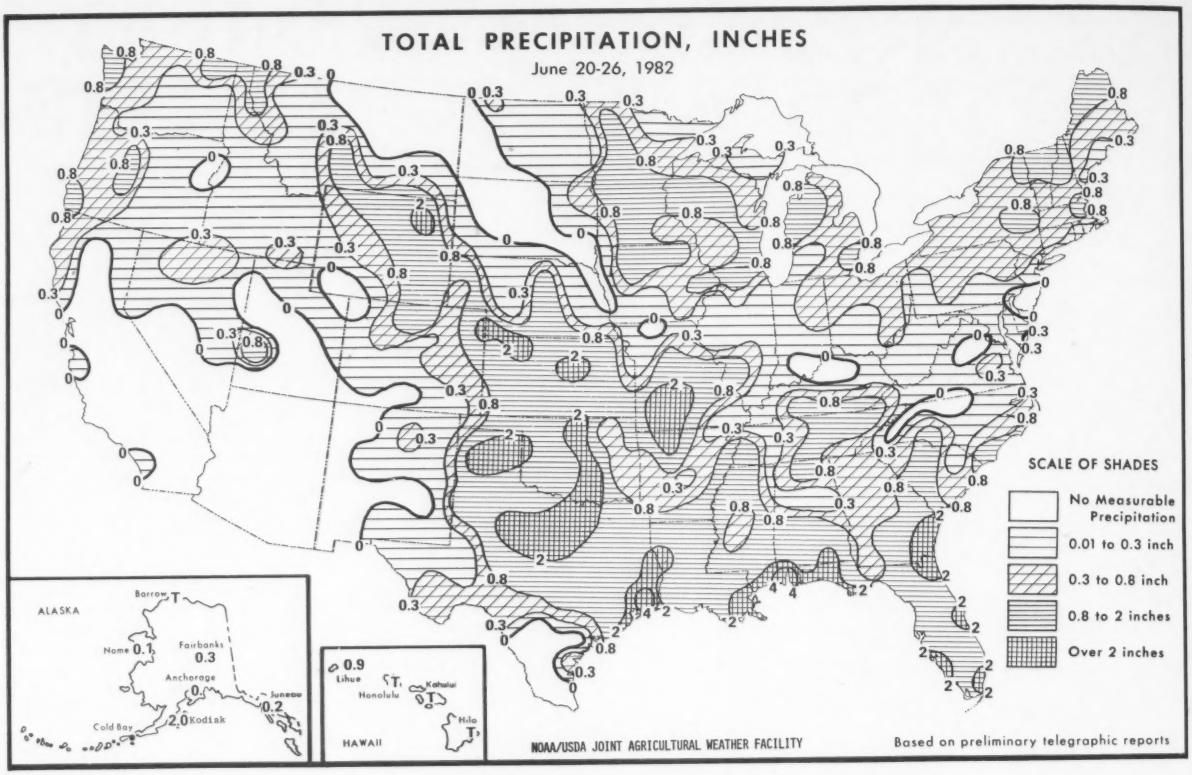
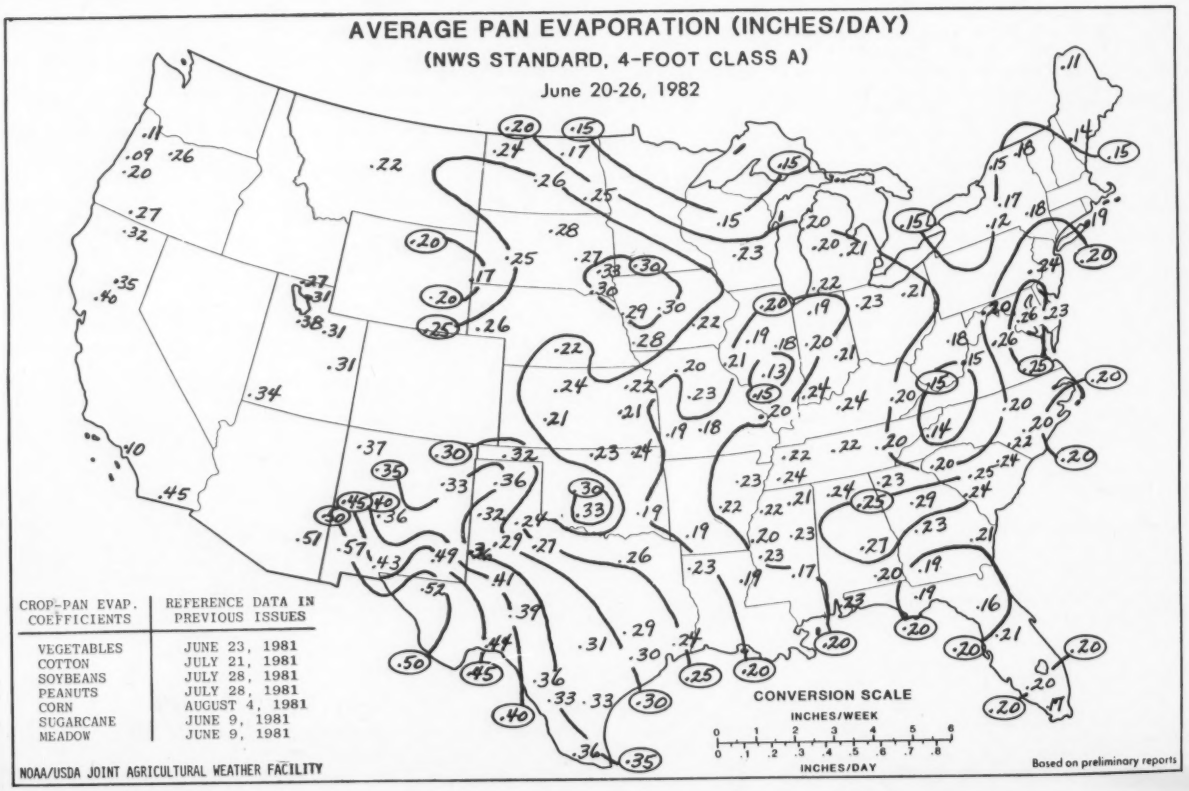
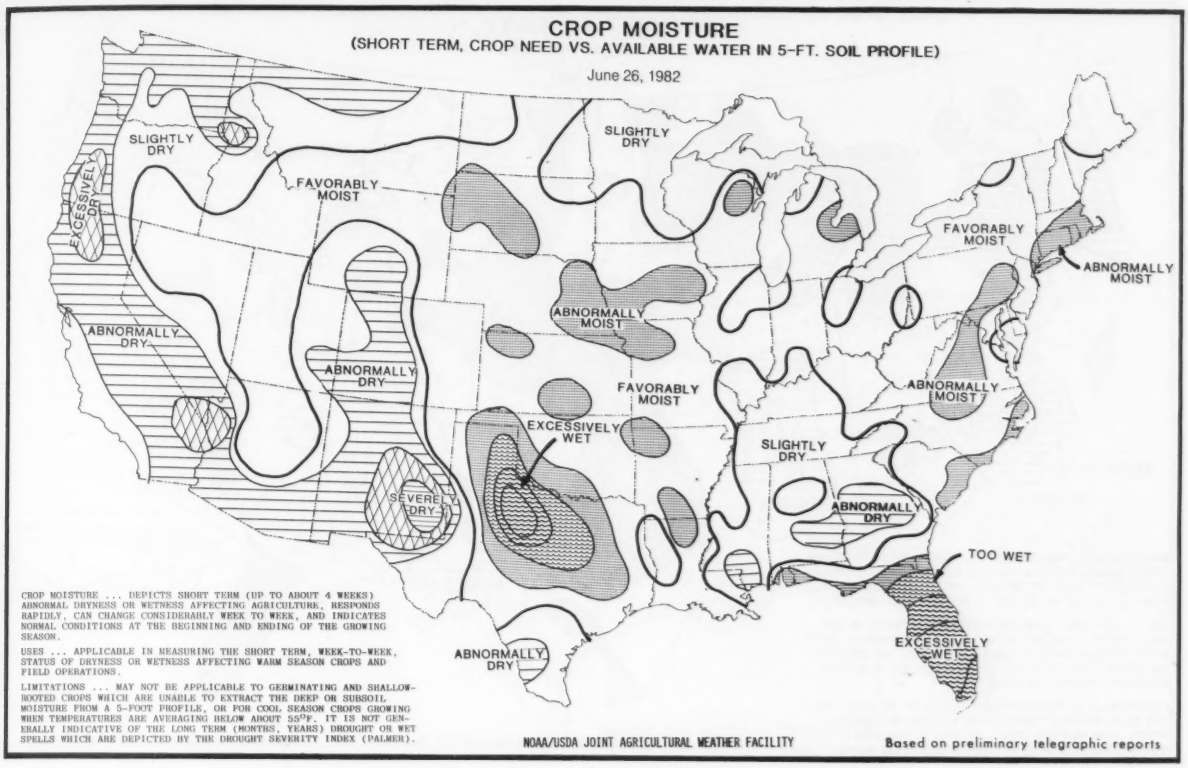
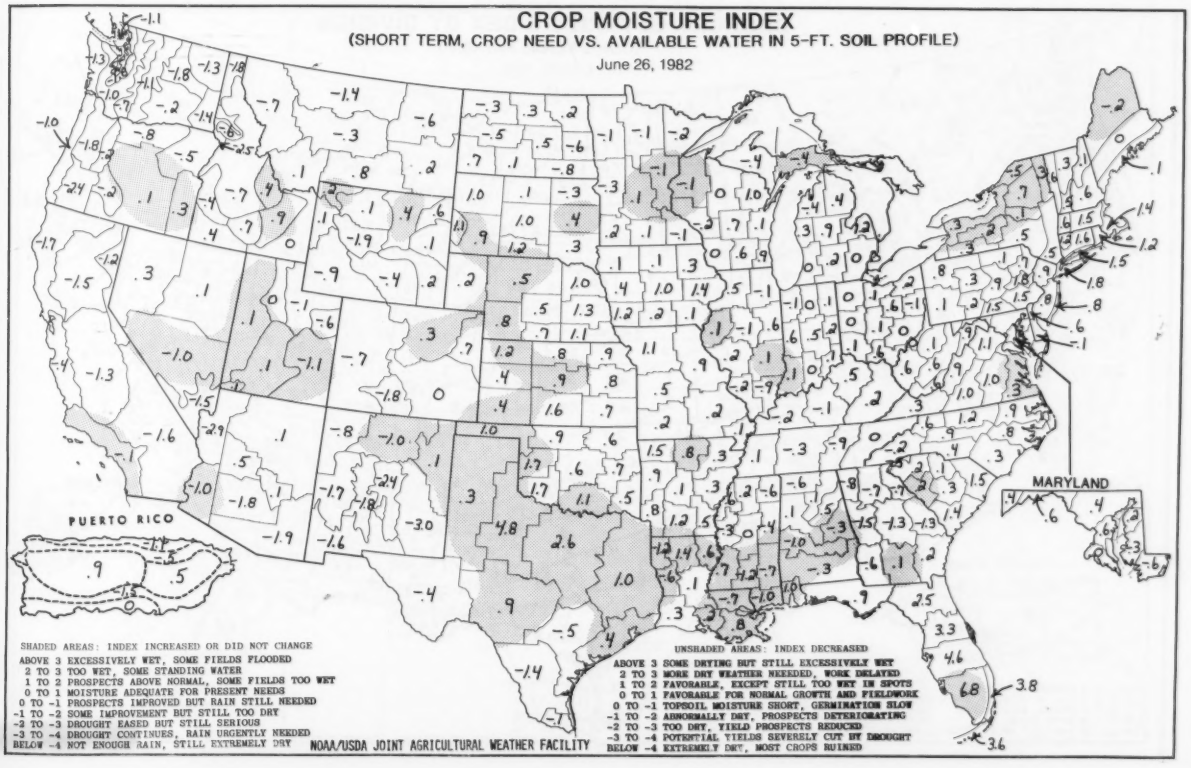
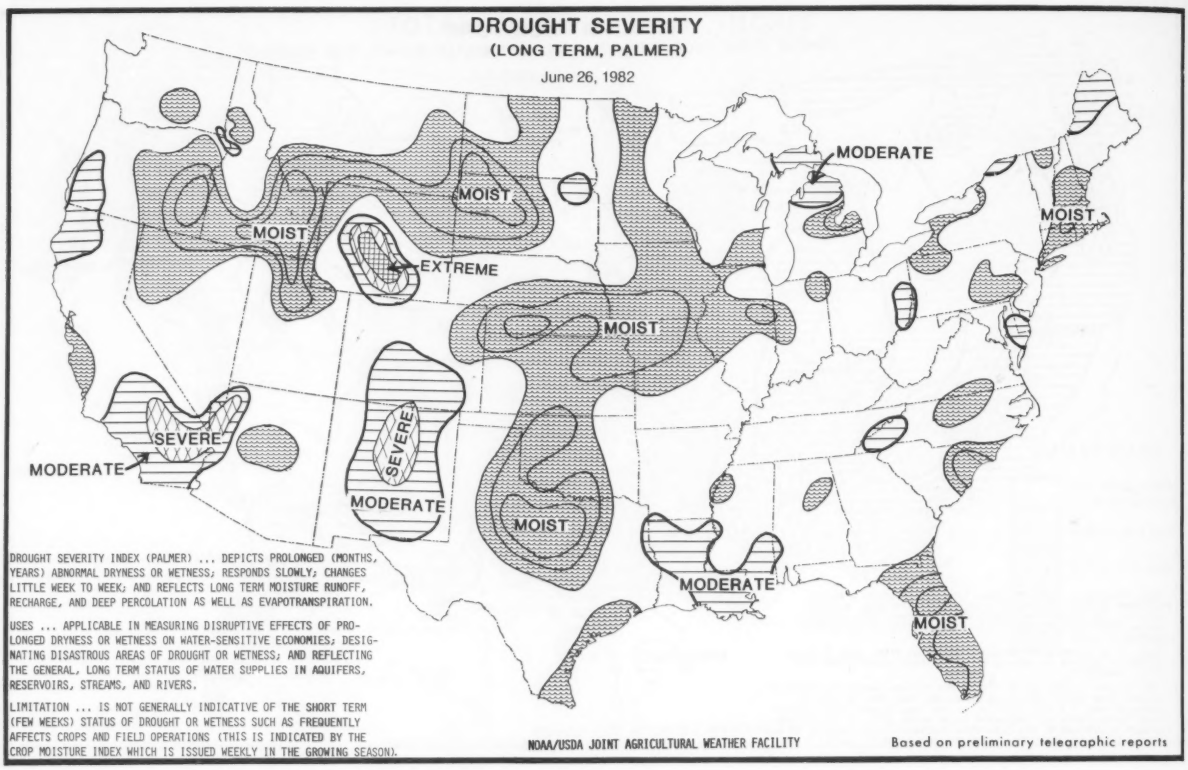
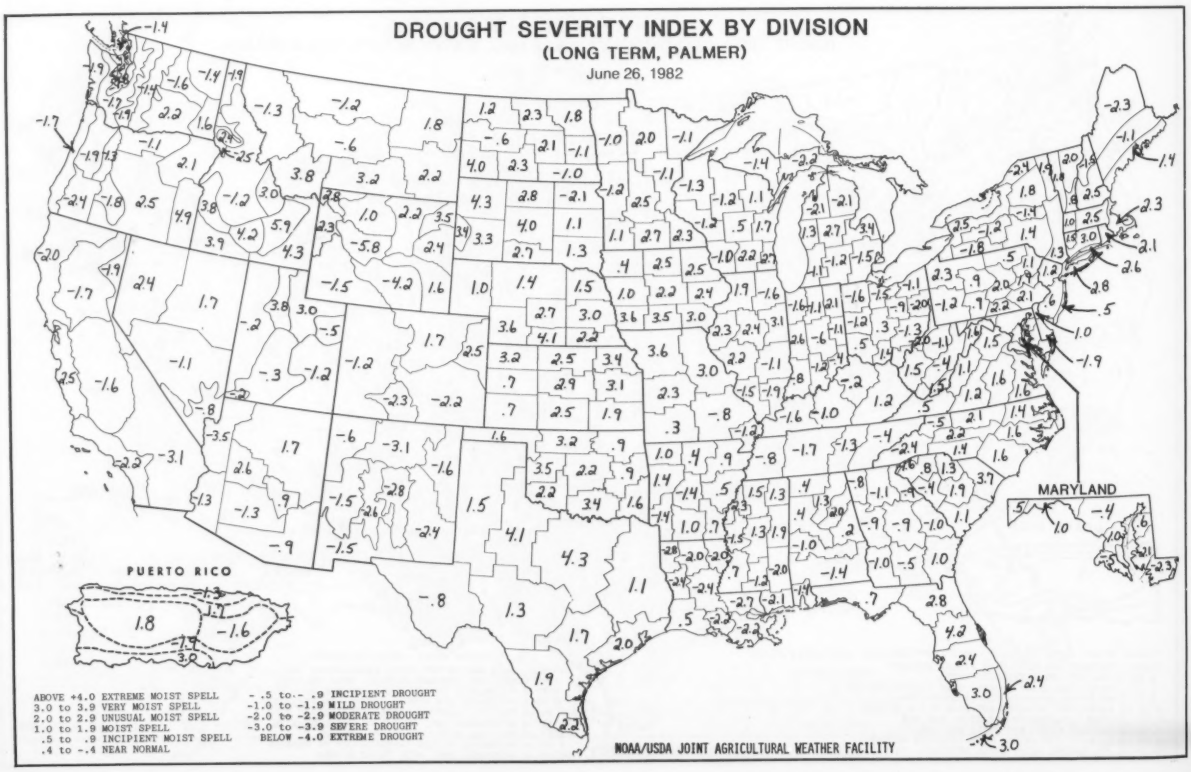

TOTAL PRECIPITATION, INCHES
June 20-26, 1982
SCALE OF SHADES
No Measurable Precipitation
0.01 to 0.3 inch
0.3 to 0.8 inch
0.8 to 2 inches
Over 2 inches
ALASKA
Barrow T
Nome 0.1
Fairbanks 0.3
Anchorage 0
Juneau 0.2
Cold Bay 2.0
Kodiak
HAWAII
Lihue 0.9
Honolulu T
Kahului T
Hilo T
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports

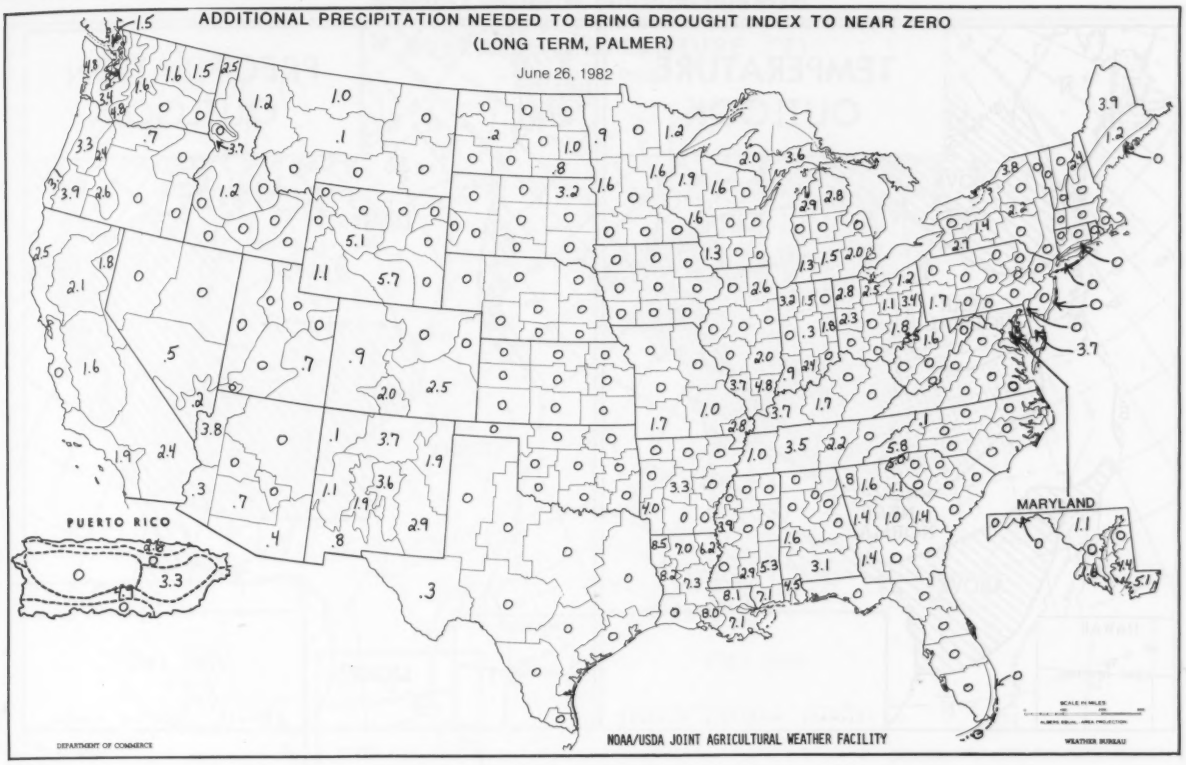

AVERAGE PAN EVAPORATION (INCHES/DAY)
(NWS STANDARD, 4-FOOT CLASS A)
June 20-26, 1982
CROP-PAN EVAP. COEFFICIENTS
REFERENCE DATA IN PREVIOUS ISSUES
VEGETABLES JUNE 23, 1981
COTTON JULY 21, 1981
SOYBEANS JULY 28, 1981
PEANUTS JULY 28, 1981
CORN AUGUST 4, 1981
SUGARCANE JUNE 9, 1981
MEADOW JUNE 9, 1981
CONVERSION SCALE
INCHES/WEEK
INCHES/DAY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

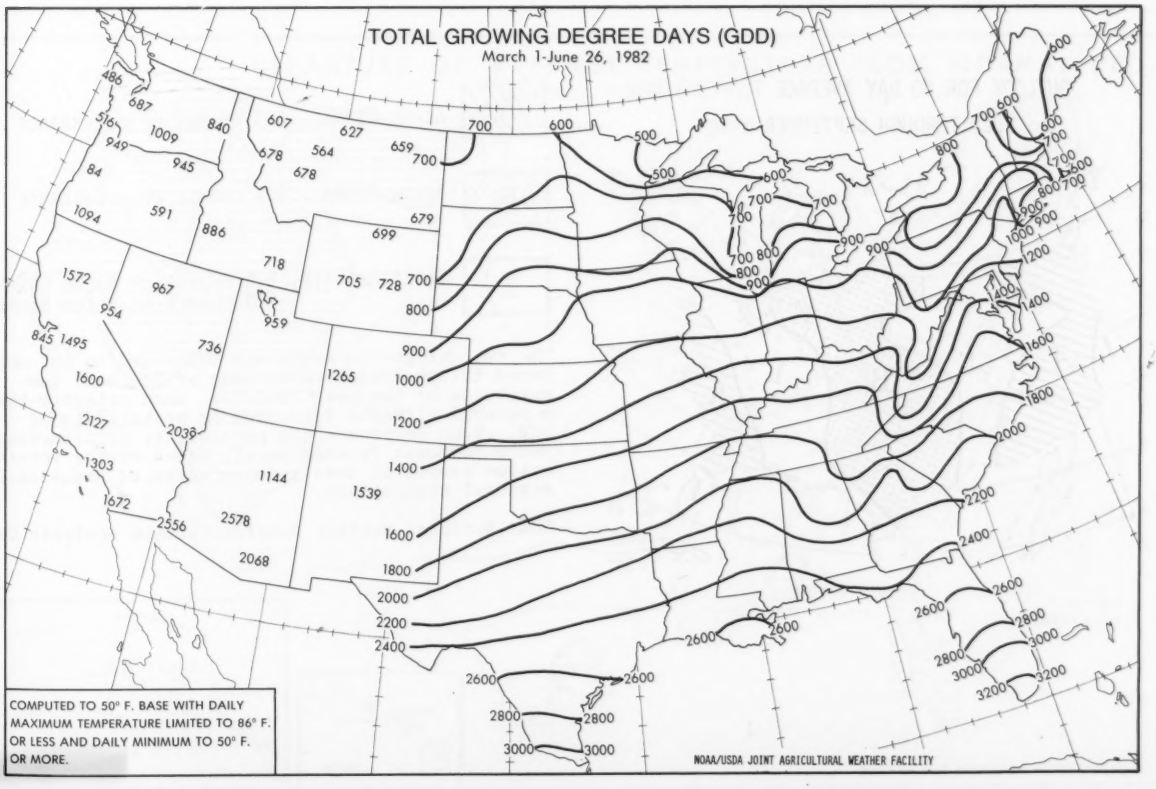

CROP MOISTURE
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
June 26, 1982
SLIGHTLY DRY
EXCESSIVELY DRY
FAVORABLY MOIST
ABNORMALLY DRY
ABNORMALLY DRY
SLIGHTLY DRY
ABNORMALLY MOIST
FAVORABLY MOIST
EXCESSIVELY WET
SEVERELY DRY
ABNORMALLY DRY
FAVORABLY MOIST
ABNORMALLY MOIST
ABNORMALLY MOIST
SLIGHTLY DRY
ABNORMALLY DRY
TOO WET
EXCESSIVELY WET
CROP MOISTURE ... DEPICTS SHORT TERM (UP TO ABOUT 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK, AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND ENDING OF THE GROWING SEASON.
USES ... APPLICABLE IN MEASURING THE SHORT TERM, WEEK-TO-WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS.
LIMITATIONS ... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW-ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX (PALMER).
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


CROP MOISTURE INDEX
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
June 26, 1982
PUERTO RICO
MARYLAND
SHADED AREAS: INDEX INCREASED OR DID NOT CHANGE
ABOVE 3 EXCESSIVELY WET, SOME FIELDS FLOODED
2 TO 3 TOO WET, SOME STANDING WATER
1 TO 2 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 TO 1 MOISTURE ADEQUATE FOR PRESENT NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL TOO DRY
-2 TO -3 DROUGHT EASED BUT STILL SERIOUS
-3 TO -4 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN, STILL EXTREMELY DRY
UNSHADED AREAS: INDEX DECREASED
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY, PROSPECTS DETERIORATING
-2 TO -3 TOO DRY, YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW -4 EXTREMELY DRY, MOST CROPS RUINED
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

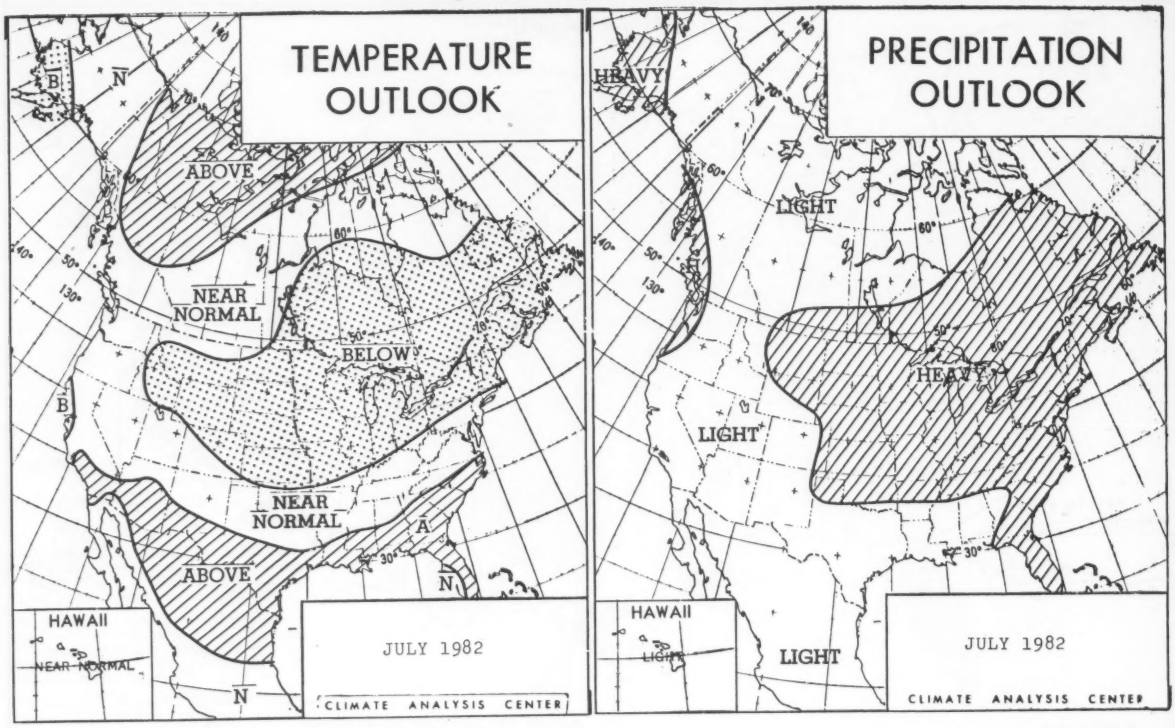

DROUGHT SEVERITY
(LONG TERM, PALMER)
June 26, 1982
MODERATE
MOIST
MOIST
EXTREME
MOIST
MOIST
SEVERE
MODERATE
SEVERE
MODERATE
MOIST
MODERATE
MOIST
DROUGHT SEVERITY INDEX (PALMER) ... DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE WEEK TO WEEK; AND REFLECTS LONG TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.
USES ... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER-SENSITIVE ECONOMIES; DESIGNATING DISASTROUS AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL, LONG TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, STREAMS, AND RIVERS.
LIMITATION ... IS NOT GENERALLY INDICATIVE OF THE SHORT TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX WHICH IS ISSUED WEEKLY IN THE GROWING SEASON).
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary telegraphic reports


DROUGHT SEVERITY INDEX BY DIVISION
(LONG TERM, PALMER)
June 26, 1982
PUERTO RICO
MARYLAND
ABOVE +4.0 EXTREME MOIST SPELL
3.0 to 3.9 VERY MOIST SPELL
2.0 to 2.9 UNUSUAL MOIST SPELL
1.0 to 1.9 MOIST SPELL
.5 to .9 INCIPIENT MOIST SPELL
.4 to -.4 NEAR NORMAL
-.5 to-.9 INCIPIENT DROUGHT
-1.0 to -1.9 MILD DROUGHT
-2.0 to -2.9 MODERATE DROUGHT
-3.0 to -3.9 SEVERE DROUGHT
BELOW -4.0 EXTREME DROUGHT
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

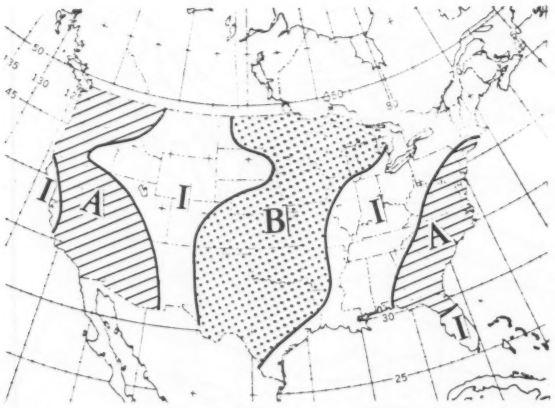

ADDITIONAL PRECIPITATION NEEDED TO BRING DROUGHT INDEX TO NEAR ZERO
(LONG TERM, PALMER)
June 26, 1982
PUERTO RICO
MARYLAND
DEPARTMENT OF COMMERCE
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
WEATHER BUREAU


TOTAL GROWING DEGREE DAYS (GDD)
March 1-June 26, 1982
COMPUTED TO 50° F. BASE WITH DAILY MAXIMUM TEMPERATURE LIMITED TO 86° F. OR LESS AND DAILY MINIMUM TO 50° F. OR MORE.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Average Monthly Weather Outlook



OUTLOOK FOR 90 DAY AVERAGE TEMPERATURES
JULY THROUGH SEPTEMBER 1982



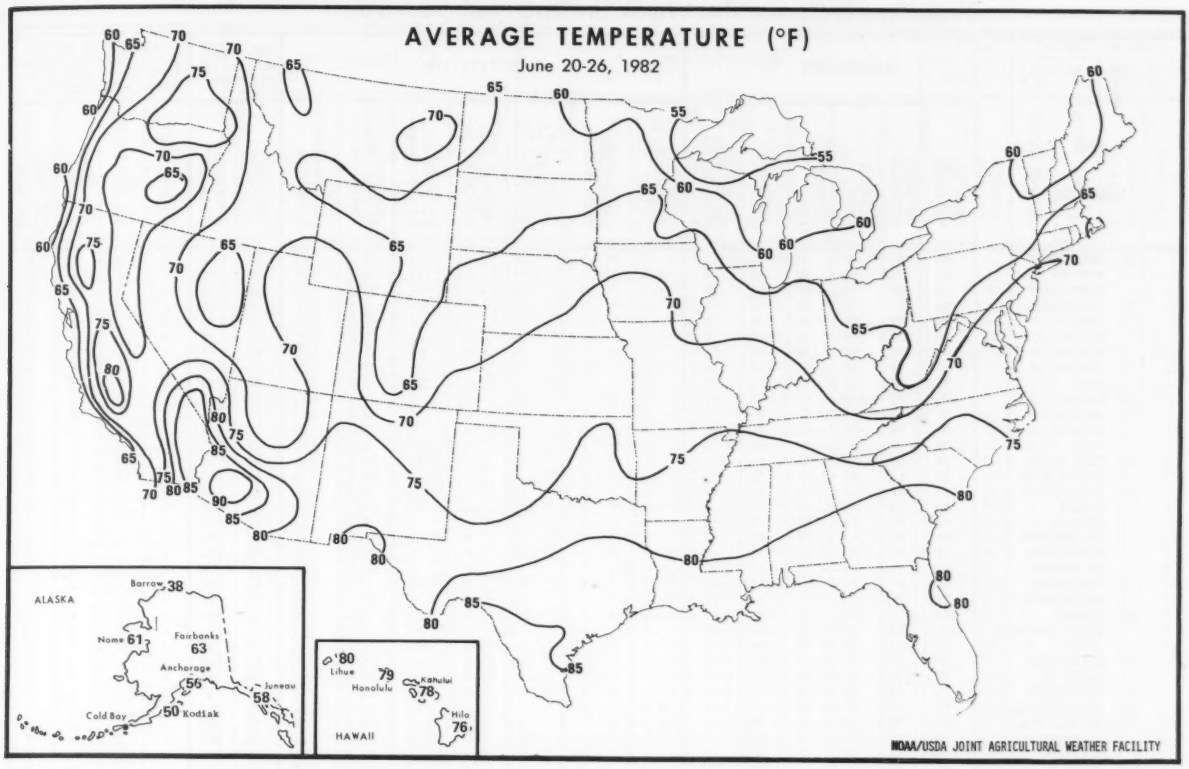
A — ABOVE NORMAL, 60% CHANCE OF OCCURRENCE

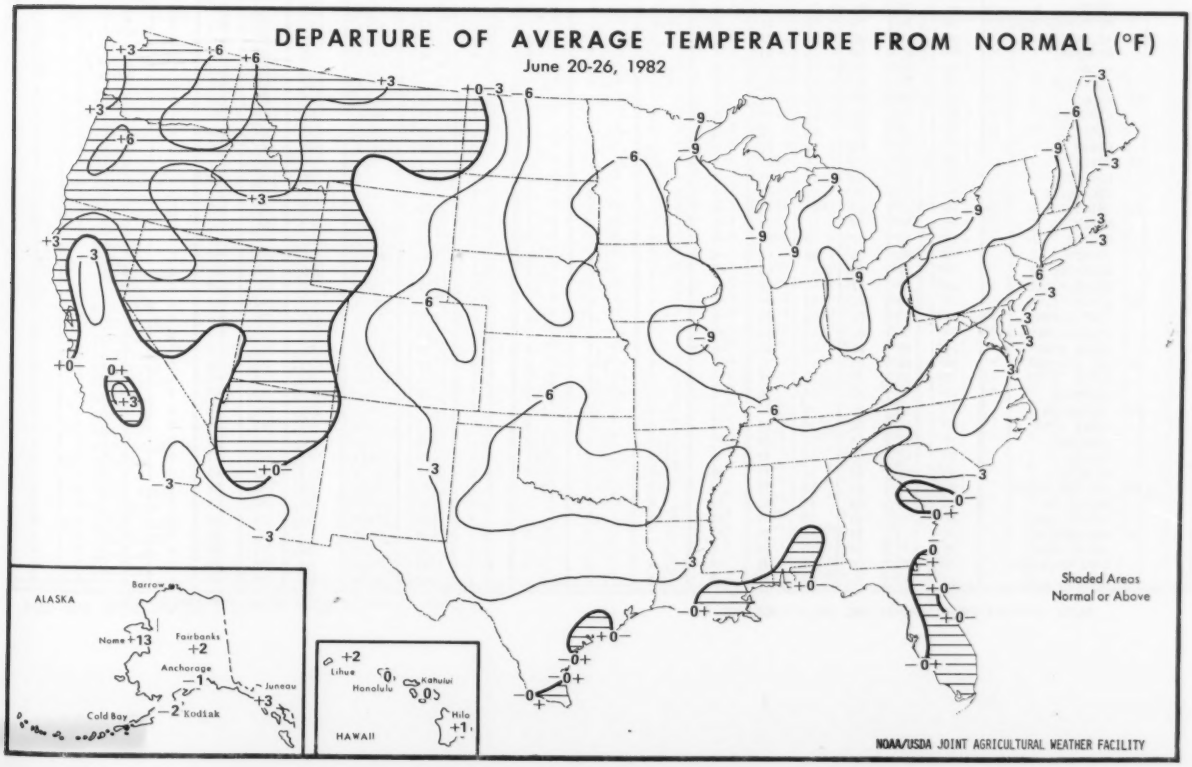
B — BELOW NORMAL, 60% CHANCE OF OCCURRENCE

I — INDETERMINATE, 50% CHANCE OF ABOVE NORMAL
50% CHANCE OF BELOW NORMAL

The two categories Above and Below are to be compared to the long-term average or "normal" temperatures of the year 1941-70. Each category has a natural climatic frequency or probability of 50%. Each carries a 60% probability of occurring where forecast (shaded area), based on the verification scores of twenty-three years of experimental seasonal predictions.

NOAA, National Weather Service, Climate Analysis Center


AVERAGE TEMPERATURE (°F)
June 20-26, 1982
ALASKA
Barrow 38
Nome 61
Fairbanks 63
Anchorage 56
Juneau 58
Cold Bay 50
Kodiak
HAWAII
Lihue 80
Honolulu 79
Kahului 78
Hilo 76
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
June 20-26, 1982
ALASKA
Barrow
Nome +13
Fairbanks +2
Anchorage -1
Juneau +3
Cold Bay -2
Kodiak
HAWAII
Lihue +2
Honolulu 0
Kahului 0
Hilo +1
Shaded Areas
Normal or Above
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Weather Data for the Week Ending June 26, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE May 30	PCT. NORMAL SINCE May 30	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	88	64	92	60	76	-3	.2	- .9	.2	7.1	192	33.4	126	97	45	2	0	2	0
MOBILE	90	72	94	70	81	0	6.4	4.6	2.9	7.6	136	32.3	108	93	54	5	0	4	4
MONTGOMERY	89	72	91	69	80	0	1.2	.1	.9	4.0	105	34.1	140	81	46	3	0	3	1
AK ANCHORAGE	64	47	76	43	56	-1	.1	- .3	.1	1.6	145	3.5	83	79	44	0	0	2	0
BARROW	44	32	57	28	38	1	T	- .1	T	0	0	1.6	114	99	73	0	5	0	0
FAIRBANKS	74	51	86	46	63	2	.3	- .1	.3	2.0	143	5.0	132	76	32	0	0	1	0
JUNEAU	72	45	85	38	58	3	.2	- .7	.2	1.7	61	19.8	105	82	41	0	0	2	0
KODIAK	54	47	61	45	50	-2	2.0	1.1	.7	5.3	136	27.8	113	99	81	0	0	4	3
NOME	71	51	80	44	61	13	.1	- .2	.1	1.6	200	7.2	157	74	38	0	0	2	0
AZ PHOENIX	104	75	108	73	90	1	0	- .1	0	0	0	3.3	132	29	8	7	0	0	0
PRESCOTT	91	55	97	53	73	0	0	- .4	0	0	0	6.4	103	35	8	2	0	0	0
TUCSON	98	64	102	63	81	-4	0	- .3	0	0	0	3.4	110	28	6	7	0	0	0
YUMA	101	70	107	66	86	-4	0	0	0	0	+100	1.6	160	45	13	7	0	0	0
AR FORT SMITH	84	64	89	58	74	-7	.6	- .2	.6	4.7	124	24.4	109	93	54	0	0	2	1
LITTLE ROCK	86	67	91	61	76	-4	.2	- .4	.1	3.7	119	28.5	112	92	60	1	0	4	0
CA BAKERSFIELD	95	72	99	67	84	3	0	0	0	0	+100	4.3	116	52	25	7	0	0	0
EUREKA	66	51	81	49	59	3	.3	.3	.3	.5	83	24.1	110	93	75	0	0	1	0
FRESNO	92	63	95	60	78	-1	0	0	0	0	0	8.3	132	81	27	5	0	0	0
LOS ANGELES	69	60	73	59	64	-2	T	0	T	0	+100	8.6	115	87	66	0	0	0	0
RED BLUFF	90	64	94	59	77	-3	0	- .1	0	0	0	11.0	86	80	36	4	0	0	0
SACRAMENTO	83	55	86	52	69	-4	0	0	0	0	0	18.0	155	90	45	0	0	0	0
SAN DIEGO	70	64	74	62	67	-1	T	0	T	0	+100	9.0	161	87	68	0	0	0	0
SAN FRANCISCO	72	57	79	54	64	2	T	0	T	0	0	22.5	199	81	58	0	0	0	0
CO DENVER	78	53	83	49	65	-5	.2	- .2	.2	2.2	122	6.4	80	76	34	0	0	4	0
GRAND JUNCTION	90	58	92	50	74	-2	.1	0	T	.1	25	2.4	63	66	16	4	0	2	0
PUEBLO	82	56	88	49	69	-5	.2	- .1	.2	2.5	208	5.5	104	90	35	0	0	1	0
CT BRIDGEPORT	76	57	80	54	67	-5	.1	- .5	.1	10.4	433	27.8	161	85	46	0	0	1	0
HARTFORD	79	54	83	51	67	-5	.4	- .4	.2	12.8	400	30.0	155	88	39	0	0	3	0
DC WASHINGTON	83	65	89	59	74	-3	.1	- .8	.1	6.2	182	21.6	124	79	39	0	0	1	0
FL APALACHICOLA	87	74	89	71	80	-1	2.3	.7	1.4	5.6	114	27.0	126	92	74	0	0	4	2
DAYTONA BEACH	87	72	92	70	79	-1	1.4	- .2	.8	8.9	156	27.9	154	96	65	1	0	4	1
JACKSONVILLE	90	72	95	70	81	1	3.8	2.2	2.8	9.0	158	23.8	114	96	61	4	0	4	2
KEY WEST	88	80	89	78	84	0	.2	- .9	.2	9.3	221	22.1	167	85	68	0	0	1	0
MIAMI	89	74	91	70	82	0	3.7	1.8	2.9	13.3	166	34.7	153	92	61	3	0	3	2
ORLANDO	89	73	92	70	81	0	.9	- 1.1	.7	8.7	132	25.6	130	96	61	3	0	5	1
TALLAHASSEE	89	71	93	69	80	-1	.8	- 1.1	.3	7.5	125	28.1	104	100	62	2	0	6	0
TAMPA	87	75	89	72	81	-1	1.4	- .4	1.2	11.8	207	23.3	127	94	65	0	0	4	1
WEST PALM BEACH	88	74	89	70	81	0	1.1	- .7	.7	10.5	142	45.4	195	96	65	0	0	4	1
GA ATLANTA	87	67	90	64	77	-1	.5	- .6	.5	3.1	89	27.2	108	87	46	1	0	1	0
AUGUSTA	93	68	94	65	81	1	.9	- .1	.5	1.9	56	19.8	94	89	43	7	0	5	1
MACON	90	70	92	68	80	-1	.4	- .6	.2	2.3	64	25.3	113	97	49	4	0	2	0
SAVANNAH	88	72	91	68	80	-1	2.7	1.0	2.3	11.3	202	27.1	124	95	61	2	0	3	1
HI HILO	84	68	87	67	76	1	T	- 1.7	T	5.1	80	86.9	142	85	57	0	0	0	0
HONOLULU	88	70	90	67	79	0	T	- .1	T	.5	125	20.6	170	82	51	1	0	1	0
KAHULUI	86	70	87	68	78	0	T	- .1	T	.1	33	20.5	193	80	56	0	0	0	0
LIHUE	87	73	88	70	80	2	.9	.6	.4	1.3	87	39.4	189	92	66	0	0	6	0
ID BOISE	87	58	93	55	73	2	.1	- .1	T	.1	9	5.6	79	69	22	2	0	3	0
LEWISTON	90	63	99	61	77	7	.4	.1	.4	.4	25	5.8	85	76	27	4	0	2	0
POCATELLO	84	51	89	46	68	1	.1	0	.1	.5	42	6.9	106	85	27	0	0	1	0
IL CHICAGO	76	50	83	44	63	-8	.1	- .8	.1	1.5	39	14.2	93	93	46	0	0	1	0
MOLINE	81	55	89	50	68	-5	.1	- 1.0	.1	3.3	80	17.8	115	86	41	0	0	1	0
PEORIA	81	55	87	50	68	-6	.3	- .6	.2	2.2	61	19.3	115	88	41	0	0	3	0
QUINCY	78	59	80	54	68	-9	.2	- .8	.2	4.3	100	19.3	--	95	54	0	0	1	0
ROCKFORD	79	52	85	47	65	-6	1.7	.7	1.7	3.4	87	16.5	102	94	46	0	0	2	1
SPRINGFIELD	82	57	87	50	70	-6	.2	- .8	.2	3.0	79	19.0	118	90	49	0	0	2	0
IN EVANSVILLE	83	59	88	54	71	-6	T	- .8	T	3.3	94	25.8	118	90	37	0	0	1	0
FORT WAYNE	76	53	82	49	65	-8	.7	- .2	.6	5.0	139	23.2	133	86	46	0	0	2	1
INDIANAPOLIS	79	56	83	49	68	-7	.3	- .7	.3	3.4	85	23.1	119	87	43	0	0	2	0
SOUTH BEND	76	55	84	49	65	-6	.2	- .7	.1	1.7	50	17.0	105	94	49	0	0	3	0
IA DES MOINES	82	60	89	53	71	-3	T	- 1.0	T	1.0	22	18.5	122	72	40	0	0	1	0
SIOUX CITY	82	57	90	50	69	-4	T	- .9	T	2.2	51	12.6	98	79	40	1	0	0	0
WATERLOO	78	54	87	46	66	-5	.8	- .4	.5	4.2	91	17.8	119	83	47	0	0	3	0
KS CONCORDIA	83	63	86	58	73	-3	1.8	.8	1.1	5.5	120	18.5	138	85	48	0	0	3	1
DODGE CITY	83	61	86	58	72	-5	.9	.1	.5	3.4	113	9.0	97	83	45	0	0	3	1
GOODLAND	79	57	85	51	68	-5	1.7	1.1	1.7	7.8	300	14.4	187	90	45	0	0	1	1
TOPEKA	83	62	87	59	73	-4	1.9	.7	1.1	6.8	128	19.9	123	90	51	0	0	3	2
WICHITA	83	63	87	58	73	-6	1.4	.3	1.1	8.9	217	21.3	163	83	49	0	0	4	1
KY BOWLING GREEN	83	57	88	49	70	-8	1.0	.1	1.0	2.1	60	22.3	88	96	38	0	0	2	1
LEXINGTON	81	57	89	50	69	-7	0	- 1.1	0	3.7	95	19.5	86	84	45	0	0	0	0
LOUISVILLE	81	58	87	52	70	-6	T	- .9	T	3.9	100	22.0	96	84	40	0	0	0	0
LA ALEXANDRIA	88	71	91	67	80	-3	1.3	.3	.6	5.0	128	22.5	--	82	51	3	0	3	1
BATON ROUGE	91	72	96	70	82	0	1.1	- .1	.8	1.9	54	23.2	89	91	54	4	0	3	1
LAKE CHARLES	88	73	90	71	81	-1	1.4	0	1.1	4.1	85	21.0	84	100	66	3	0	3	1
NEW ORLEANS	90	71	93	69	81	0	2.8	1.4	1.1	4.8	107	24.8	94	99	63	5	0	5	3

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending June 26, 1982

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE May 30	PCT. NORMAL SINCE May 30	TOTAL, IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	88	68	90	64	78	-4	.8	.1	.7	1.6	50	16.0	67	99	55	2	0	2	1
ME CARIBOU	70	52	75	47	61	-2	1.0	.1	.4	2.8	88	14.6	103	95	53	0	0	3	0
PORTLAND	71	52	76	47	61	-5	.2	- .5	.1	5.7	197	23.3	122	92	50	0	0	4	0
MD BALTIMORE	81	59	86	53	70	-5	T	- .9	T	5.6	165	21.5	116	84	43	0	0	1	0
SALISBURY	82	61	86	54	72	-4	T	- .8	T	4.7	142	20.9	107	95	48	0	0	1	0
MA BOSTON	77	59	83	56	68	-4	1.4	.7	1.3	12.8	413	28.2	138	85	45	0	0	2	1
CHATHAM	71	57	73	55	64	--	T	--	T	4.2	--	22.0	—	92	66	0	0	1	0
MI ALPENA	68	44	74	40	56	-8	.6	0	.5	3.6	138	11.1	95	96	55	0	0	3	0
DETROIT	74	52	82	46	63	-8	.9	.1	.9	2.6	81	14.7	98	91	47	0	0	1	1
FLINT	72	51	77	45	62	-7	.4	- .4	.3	3.1	100	10.5	78	93	51	0	0	3	0
GRAND RAPIDS	74	51	78	45	62	-8	.2	- .6	.1	2.2	69	14.2	98	94	51	0	0	2	0
HOUGHTON LAKE	67	47	73	40	57	-8	1.2	.4	1.0	3.9	126	14.2	119	96	60	0	0	2	1
LANSING	72	50	78	44	61	-9	.2	- .5	.1	3.4	106	11.4	78	97	57	0	0	3	0
MARQUETTE	63	39	74	33	51	-11	.1	- .9	.1	1.3	33	14.7	100	97	55	0	0	2	0
MUSKEGON	69	49	74	43	59	-10	1.2	.6	1.1	3.1	124	15.9	115	95	59	0	0	2	1
SAULT STE. MARIE	65	36	69	34	51	-11	.5	- .2	.4	1.7	55	15.1	119	98	53	0	0	4	0
MN ALEXANDRIA	75	52	86	47	63	-5	1.1	.2	1.0	2.1	54	11.5	105	91	39	0	0	2	1
DULUTH	66	44	75	36	55	-8	.4	- .6	.4	1.5	38	12.3	96	86	49	0	0	1	0
INT'L FALLS	71	45	76	39	58	-6	.2	- .8	.1	2.7	73	10.2	99	97	47	0	0	3	0
MINNEAPOLIS	77	54	87	47	66	-5	1.0	.1	.6	1.7	45	13.0	115	82	34	0	0	3	1
ROCHESTER	74	52	85	45	63	-6	.4	- .7	.4	2.0	45	16.0	127	91	51	0	0	2	0
MS GREENWOOD	89	71	93	68	80	-2	1.1	.2	.6	3.9	118	28.4	—	93	50	3	0	3	1
JACKSON	89	69	92	65	79	-2	.6	- .2	.6	5.3	166	27.1	108	99	54	3	0	3	1
MERIDIAN	89	68	91	65	79	-2	1.4	.4	1.3	3.8	112	27.3	105	93	52	4	0	3	1
MO CAPE GIRARDEAU	84	63	87	58	74	-5	T	- .8	T	4.7	121	27.7	127	94	48	0	0	1	0
COLUMBIA	81	60	83	55	71	-5	1.7	.7	1.7	6.3	147	20.5	119	97	59	0	0	2	1
KANSAS CITY	83	62	87	59	73	-3	.1	- 1.1	.1	8.3	163	24.0	144	94	49	0	0	1	0
SAINT LOUIS	81	62	84	59	72	-6	.9	- .1	.8	6.7	163	22.4	127	87	42	0	0	3	1
SPRINGFIELD	84	62	86	54	73	-3	2.6	1.6	2.3	6.6	150	21.1	110	95	59	0	0	3	1
MT BILLINGS	76	57	86	54	67	-1	.1	- .3	.1	4.7	214	11.7	148	85	47	0	0	2	0
GLASGOW	81	52	91	44	67	0	T	- .5	T	.7	29	6.5	127	72	32	1	0	0	0
GREAT FALLS	78	53	85	47	66	0	.1	- .4	.1	.9	32	9.6	112	79	38	0	0	2	0
HAVRE	83	55	95	46	69	3	T	- .5	T	0	0	7.8	130	67	26	1	0	0	0
HELENA	78	53	86	48	66	2	.1	- .3	T	1.1	50	6.4	107	83	38	0	0	3	0
KALISPELL	80	49	85	45	65	4	.2	- .2	.2	.7	32	8.0	103	96	41	0	0	1	0
MILES CITY	82	58	94	54	70	0	T	- .6	T	3.2	110	7.8	107	79	34	1	0	1	0
MISSOULA	79	55	89	50	67	4	.5	.1	.4	.8	42	9.1	138	91	47	0	0	3	0
NE GRAND ISLAND	80	58	86	54	69	-6	1.0	.1	.9	3.7	90	19.0	157	91	47	0	0	2	1
LINCOLN	83	59	88	52	71	-5	.2	- .9	.1	5.1	111	17.3	130	87	47	0	0	2	0
NORFOLK	81	57	87	51	69	-5	T	- 1.0	T	1.9	42	14.2	115	77	33	0	0	1	0
NORTH PLATTE	81	55	85	47	68	-4	.2	- .6	.2	1.9	54	10.6	109	88	47	0	0	2	0
OMAHA	81	60	87	58	71	-3	T	- 1.0	T	2.9	63	18.2	131	79	45	0	0	0	0
SCOTTSBLUFF	78	56	88	51	67	-4	.8	.2	.5	6.6	254	11.0	138	91	44	0	0	3	0
VALENTINE	79	52	90	47	65	-6	.4	- .3	.3	1.9	59	10.7	123	81	41	1	0	3	0
NV ELY	84	42	92	39	63	0	T	- .2	T	0	0	5.7	127	78	21	1	0	2	0
LAS VEGAS	100	71	103	67	86	-1	0	- .1	0	0	0	1.8	106	25	9	7	0	0	0
RENO	85	50	88	45	67	1	T	- .1	T	.6	200	3.8	93	77	21	0	0	1	0
WINNEMUCCA	86	54	93	44	70	3	.4	.3	.4	.5	50	2.8	55	69	20	1	0	3	0
NH CONCORD	74	48	79	42	61	-8	.8	0	.4	6.7	216	21.0	132	87	44	0	0	4	0
NJ ATLANTIC CITY	82	60	86	52	71	-2	T	- .8	T	3.3	106	17.5	87	90	44	0	0	0	0
NM ALBUQUERQUE	93	61	96	51	77	-1	.1	- .2	.1	.1	17	2.0	74	55	10	6	0	1	0
CLOVIS	87	61	95	54	74	-3	.2	- .4	.2	1.5	63	4.4	—	83	35	3	0	2	0
ROSWELL	93	63	97	54	78	-1	T	- .4	T	.1	8	1.7	38	78	21	6	0	0	0
NY ALBANY	74	49	80	45	62	-9	1.0	.3	.9	4.7	168	18.1	125	93	50	0	0	3	1
BINGHAMTON	70	52	76	47	61	-7	.3	- .5	.3	4.8	150	18.3	110	88	48	0	0	2	0
BUFFALO	68	52	77	48	60	-9	.4	- .1	.2	3.2	160	19.8	128	96	54	0	0	3	0
NEW YORK	77	62	84	60	70	-6	.2	- .6	.2	4.2	150	19.8	108	81	42	0	0	2	0
ROCHESTER	71	53	77	48	62	-8	.4	- .2	.3	3.4	142	13.7	96	91	50	0	0	4	0
SYRACUSE	71	50	76	49	61	-9	.8	.1	.5	3.9	134	15.6	94	98	55	0	0	3	0
NC ASHEVILLE	80	61	84	57	71	-2	T	- 1.0	T	3.4	92	24.7	118	96	54	0	0	0	0
CHARLOTTE	83	66	86	64	75	-3	.9	.7	.8	4.4	191	23.5	120	97	55	0	0	4	1
GREENSBORO	80	64	83	61	72	-4	T	- 1.0	T	8.4	233	27.5	146	97	64	0	0	0	0
HATTERAS	80	67	83	60	74	-3	1.1	- .1	.9	5.4	123	31.1	144	99	67	0	0	2	1
NEW BERN	80	66	85	62	73	-6	.4	- 1.2	.4	4.9	96	22.8	98	96	65	0	0	1	0
RALEIGH	83	66	88	64	75	-2	.2	- .8	.2	7.7	226	26.0	138	88	50	0	0	1	0
WILMINGTON	83	69	90	64	76	-3	1.6	- .1	1.6	7.0	135	27.0	124	90	58	1	0	2	1
ND BISMARCK	75	48	83	43	62	-6	T	- .7	T	1.8	56	8.5	108	87	42	0	0	1	0
FARGO	77	47	91	41	62	-6	T	- .7	T	1.5	50	6.7	78	84	34	1	0	1	0
GRAND FORKS	74	45	83	37	59	-8	.1	- .7	.1	1.9	61	7.8	93	99	47	0	0	2	0
WILLISTON	84	53	92	48	69	2	T	- .7	T	1.5	50	7.4	99	88	41	1	0	0	0
OH AKRON-CANTON	74	52	81	48	63	-8	.4	- .5	.3	2.6	74	17.2	99	84	44	0	0	2	0
CINCINNATI	79	55	84	48	67	-8	.1	- .8	.1	3.9	111	23.1	113	80	41	0	0	1	0
CLEVELAND	74	51	81	45	63	-8	.7	- .1	.4	3.3	110	16.6	99	89	47	0	0	2	0
COLUMBUS	77	51	84	46	64	-9	.1	- .9	.1	2.5	66	19.3	101	96	44	0	0	1	0

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending June 26, 1982

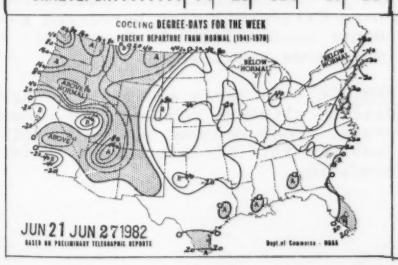
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE May 30	PCT. NORMAL SINCE May 30	TOTAL IN., SINCE Jan. 1	PCT. NORMAL SINCE Jan. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	77	54	83	48	65	-9	.3	- .6	.2	2.5	68	22.4	123	85	45	0	0	2	0
TOLEDO	75	51	82	45	63	-9	.5	- .3	.2	1.9	58	14.3	97	96	49	0	0	3	0
YOUNGSTOWN	73	49	82	43	61	-9	.2	- .7	.1	4.3	130	18.5	102	96	54	0	0	2	0
OK OKLAHOMA CITY	84	63	87	59	74	-6	1.6	.8	1.3	4.6	112	24.1	151	94	55	0	0	3	1
TULSA	85	67	90	62	76	-4	.5	- .5	.4	4.5	100	19.6	108	93	53	1	0	2	0
OR ASTORIA	65	53	70	49	59	1	.7	.3	.6	1.2	55	40.1	126	90	68	0	0	2	1
BURNS	81	48	80	42	64	0	.2	0	.1	.9	113	5.9	94	--	--	0	0	2	0
MEDFORD	87	58	95	51	72	4	.5	.4	.4	.7	78	8.9	86	88	32	3	0	3	0
PENDLETON	89	63	96	58	76	6	.1	- .1	.1	.2	20	4.9	74	67	22	2	0	1	0
PORTLAND	82	58	90	53	70	5	.3	.1	.3	1.6	107	20.3	110	83	42	1	0	2	0
SALEM	85	56	93	50	70	6	.6	.4	.6	1.3	100	20.8	100	88	43	1	0	1	1
PA ALLENTOWN	77	55	83	51	66	-7	.4	- .5	.4	6.7	203	22.9	119	95	43	0	0	1	0
ERIE	69	52	76	48	61	-7	.7	- .1	.5	5.5	167	18.9	116	83	56	0	0	4	0
HARRISBURG	77	54	84	50	66	-9	T	- .9	T	7.9	139	24.1	120	95	42	0	0	1	0
PHILADELPHIA	81	60	89	55	70	-5	0	- .9	0	5.6	165	25.8	147	87	41	0	0	0	0
PITTSBURGH	75	49	82	44	62	-9	.1	- .8	T	2.1	60	17.4	98	89	43	0	0	2	0
SCRANTON	75	53	81	50	64	-7	.5	- .4	.4	6.6	200	21.0	138	86	45	0	0	3	0
RI PROVIDENCE	76	56	81	51	66	-4	.2	- .4	.1	10.3	412	28.4	149	84	37	0	0	2	0
SC CHARLESTON	87	73	92	70	80	0	.6	- 1.2	.4	7.9	136	24.5	112	93	59	2	0	4	0
COLUMBIA	87	68	91	65	78	-3	.9	- .2	.9	5.2	141	23.5	110	96	51	2	0	1	1
FLORENCE	85	68	90	65	76	-3	.2	- 1.1	.2	5.3	126	22.7	116	99	57	1	0	2	0
GREENVILLE	83	65	85	60	74	-4	.5	- .5	.4	4.2	117	27.9	118	91	54	0	0	3	0
SD ABERDEEN	76	50	88	42	63	-6	0	- .8	0	--	--	--	--	87	43	0	0	0	0
HURON	79	52	91	46	65	-6	.1	- .7	.1	2.0	57	10.1	104	88	46	1	0	1	0
RAPID CITY	75	53	82	50	64	-5	T	- .7	T	2.9	88	12.2	126	90	50	0	0	1	0
SIOUX FALLS	79	50	86	41	65	-7	T	- .9	T	2.2	55	9.8	81	83	41	0	0	0	0
TN CHATTANOOGA	86	63	91	58	75	-3	.5	- .6	.4	1.6	47	26.5	102	90	40	1	0	2	0
KNOXVILLE	83	62	87	57	72	-5	1.4	.4	1.2	3.7	106	29.8	127	96	57	0	0	3	1
MEMPHIS	88	71	90	66	79	-2	.9	.1	.9	5.2	158	32.2	123	86	50	3	0	1	1
NASHVILLE	86	62	90	55	74	-5	.5	- .3	.5	2.6	81	25.5	107	90	37	1	0	1	1
TX ABILENE	89	67	93	63	78	-5	2.3	1.8	1.3	3.2	123	13.1	115	91	46	3	0	5	2
AMARILLO	87	58	92	54	72	-5	3.1	2.4	1.7	4.4	147	7.9	96	85	39	2	0	5	2
AUSTIN	94	72	97	68	83	-1	1.2	.6	1.0	3.0	100	15.9	99	89	45	7	0	3	1
BEAUMONT	90	73	91	72	82	-1	7.0	5.7	2.9	7.5	163	31.2	131	93	62	5	0	6	4
BROWNSVILLE	96	77	97	74	87	3	0	- .5	0	0	0	14.2	153	86	45	7	0	0	0
CORPUS CHRISTI	93	74	96	69	83	-1	.4	- .1	.2	.5	20	14.3	121	100	54	7	0	3	0
DEL RIO	96	73	101	69	85	-2	.4	.1	.4	2.2	116	7.0	86	86	39	6	0	2	0
EL PASO	98	62	104	58	80	-2	T	- .3	T	0	0	1.1	48	63	15	6	0	1	0
FORT WORTH	89	69	93	67	79	-4	2.6	2.1	1.3	4.3	154	26.5	156	96	55	3	0	3	3
GALVESTON	88	76	90	70	82	-1	2.4	1.3	1.3	3.4	89	15.6	94	82	68	1	0	4	2
HOUSTON	93	72	96	69	83	0	1.0	0	.8	1.1	26	15.2	71	89	46	7	0	4	1
LUBBOCK	84	61	92	59	72	-7	1.8	1.2	.9	4.1	152	12.1	142	95	51	1	0	5	1
MIDLAND	93	64	101	58	79	-3	.2	- .1	.2	.6	40	5.4	93	91	33	5	0	2	0
SAN ANGELO	91	67	94	62	79	-4	1.8	1.4	1.2	4.3	226	12.3	146	90	43	6	0	3	2
SAN ANTONIO	94	71	98	67	83	-1	T	- .5	T	1.0	38	11.3	90	90	43	7	0	0	0
VICTORIA	95	75	97	71	85	1	T	- .7	T	.1	3	16.1	107	89	44	7	0	0	0
WACO	91	70	94	66	81	-4	1.9	1.4	1.3	3.1	115	18.2	108	92	54	6	0	4	1
WICHITA FALLS	89	64	92	62	77	-8	1.9	1.3	1.3	7.8	236	28.7	209	99	48	4	0	3	2
UT BLANDING	89	55	89	49	72	1	T	- .1	T	0	0	4.6	100	45	22	0	0	0	0
CEDAR CITY	88	52	91	48	70	0	0	- .1	0	.3	75	7.0	163	52	14	3	0	0	0
SALT LAKE CITY	87	59	89	56	73	1	.2	- .1	.2	.6	50	8.1	98	66	21	0	0	2	0
VT BURLINGTON	68	51	74	46	59	-9	1.4	.5	1.1	4.6	139	15.6	114	95	53	0	0	5	1
VA NORFOLK	81	64	88	60	72	-5	.1	- 1.0	.1	2.8	80	19.5	106	90	48	0	0	1	0
RICHMOND	83	66	89	61	74	-2	.5	- .6	.3	5.6	160	21.2	118	95	53	0	0	3	0
ROANOKE	80	58	85	51	69	-5	.1	- .7	T	5.3	161	22.8	128	93	52	0	0	2	0
WA COLVILLE	84	59	89	55	72	7	.8	.6	.4	1.5	100	9.8	118	74	47	0	0	4	0
QUILLAYUTE	67	50	80	43	59	2	1.3	.6	1.2	1.4	44	61.7	122	94	55	0	0	2	1
SEATTLE-TACOMA	78	54	86	51	66	4	.3	.1	.3	.3	21	19.7	107	81	41	0	0	1	0
SPOKANE	88	61	94	55	74	8	.1	- .2	.1	.3	23	7.5	83	73	26	2	0	1	0
YAKIMA	89	59	97	50	74	5	.1	- .1	T	.1	14	3.2	76	72	27	3	0	2	0
WV BECKLEY	74	55	79	47	64	-6	T	- 1.0	T	2.9	76	19.1	91	94	51	0	0	1	0
CHARLESTON	81	55	87	50	68	-7	.2	- .8	.2	6.7	209	24.7	127	95	43	0	0	2	0
HUNTINGTON	79	55	85	50	67	-8	.3	- .6	.3	5.2	163	23.0	118	96	46	0	0	2	0
PARKERSBURG	80	54	86	50	67	-6	.5	- .6	.5	4.2	98	19.0	87	95	37	0	0	1	0
WI GREEN BAY	70	48	78	41	59	-9	.6	- .2	.3	1.7	53	10.5	89	96	51	0	0	5	0
LA CROSSE	76	53	83	47	65	-7	.5	- .5	.3	.9	24	9.5	73	100	53	0	0	3	0
MADISON	74	50	80	44	62	-7	.7	- .2	.4	3.0	77	14.3	109	92	47	0	0	3	0
MILWAUKEE	71	50	82	47	60	-8	1.8	.9	1.0	3.1	91	16.7	126	90	51	0	0	3	2
WAUSAU	70	49	75	44	60	-8	1.9	.9	1.5	5.4	129	16.1	118	94	47	0	0	3	1
WY CASPER	79	52	88	47	65	-2	.9	.6	.6	4.2	280	8.9	139	85	34	0	0	3	1
CHEYENNE	72	49	78	44	60	-6	1.7	1.2	1.3	4.0	190	8.7	116	91	44	0	0	5	1
LANDER	80	53	85	48	66	0	.6	.3	.6	1.4	78	4.9	57	65	31	0	0	1	1
SHERIDAN	78	52	87	46	65	-1	1.3	.8	1.0	3.9	139	8.6	93	84	45	0	0	3	1
PR SAN JUAN	88	76	90	74	82	2	T	- 1.3	T	3.3	62	24.8	112	87	65	1	0	3	0

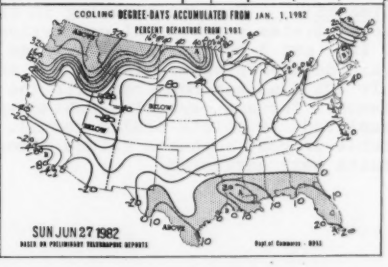
BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

COOLING DEGREE DAYS (BASE 65°) FOR WEEK ENDING JUN. 27, 1982.

BASED ON 1941-70 NORMALS. + ACCUMULATION FROM JAN. 1, 1982

STATES AND STATIONS	WEEKLY TOTAL	WEEKLY DEPARTURE*	SEASONAL ACCUMULATION + TOTAL	SEASONAL ACCUMULATION + DEPARTURE*	SEASONAL ACCUMULATION + DEPARTURE FROM 1981
ALA. BIRMINGHAM	80	-17	607	-25	-97
MOBILE	106	-6	978	33	55
MONTGOMERY	107	2	843	89	6
ARIZ. FLAGSTAFF	25	18	25	14	-65
PHOENIX	179	15	1367	314	319
TUCSON	120	15	745	108	270
WINSLOW	91	26	188	59	183
YUMA	156	7	1329	36	315
ARK. FORT SMITH	73	-30	458	-123	-125
LITTLE ROCK	86	-18	599	-28	-69
CALIF. BAKERSFIELD	135	35	843	281	14
EUREKA	0	0	0	0	4
FRESNO	87	8	410	6	336
LOS ANGELES	4	-13	24	-68	-261
RED BLUFF	80	11	457	15	233
SAN DIEGO	20	-1	144	-32	-219
SAN FRANCISCO	5	-2	18	-3	-61
STOCKTON	51	11	257	27	376
COLO. DENVER	10	-26	17	-75	-170
GRAND JUNCTION	79	15	215	4	155
PUEBLO	38	-22	127	-90	-225
CONN. BRIDGEPORT	17	-21	45	-64	-83
HARTFORD	22	-13	72	-36	-120
DEL. WILMINGTON	51	-8	212	-4	-69
D.C. WASHINGTON	71	-10	359	-9	-194
FLA. APALACHICOLA	103	-9	871	-59	-28
DAYTONA BEACH	105	0	1051	-16	-74
FORT MYERS	143	-24	1854	-422	-283
JACKSONVILLE	111	-6	1011	-102	-38
KEY WEST	138	-5	2338	-248	-510
LAKELAND	110	-6	1278	-0	-122
MIAMI	122	-5	1764	-354	-257
ORLANDO	115	-3	1419	-196	-198
TALLAHASSEE	106	-6	927	-6	-94
TAMPA	115	-2	1274	-20	-175
WEST PALM BEACH	115	-3	1778	-309	-284
GA. ATLANTA	83	-1	582	-102	-134
AUGUSTA	112	-12	615	-56	-81
MACON	105	-6	765	-46	-79
SAVANNAH	104	-1	859	-50	-77
IDAHO. BOISE	55	-22	107	-17	-67
LEWISTON	77	-47	177	-92	-143
POCATELLO	21	-3	32	-14	-1
ILL. CAIRO	74	-26	541	-17	-48
CHICAGO	15	-24	129	-26	-24
MOLINE	30	-25	155	-78	-34
PEORIA	34	-25	224	-31	-32
ROCKFORD	23	-19	172	-3	-23
SPRINGFIELD	47	-22	287	-19	-72
IND. EVANSVILLE	56	-25	361	-49	-69
FORT WAYNE	23	-22	161	-24	-3
INDIANAPOLIS	30	-30	225	-34	-44
SOUTH BEND	26	-15	160	-5	-31
IOWA. BURLINGTON	33	-26	176	-83	-39
DES MOINES	50	-4	158	-66	-115
DUBUQUE	18	-17	106	-30	-17
SIOUX CITY	37	-17	108	-125	-134
KANS. CONCORDIA	54	-16	185	-126	-165
DODGE CITY	46	-34	205	-139	-283
GOODLAND	26	-27	70	-108	-146
TOPEKA	56	-18	191	-178	-197
WICHITA	59	-32	250	-196	-223
KY. LEXINGTON	40	-28	272	-74	-37
LOUISVILLE	46	-25	297	-56	-142
LA. BATON ROUGE	115	-2	1209	276	270
LAKE CHARLES	102	-11	997	5	-62
NEW ORLEANS	100	-3	1209	225	120
SHREVEPORT	94	-23	864	-39	-104
MAINE. CARIBOU	0	-5	15	-10	-5
PORTLAND	2	-8	10	-6	-39
MD. BALTIMORE	43	-23	233	-32	-122
MASS. BOSTON	23	-14	65	-53	-175
MICH. ALPENA	0	-9	7	-23	-27
DETROIT	13	-26	93	-54	-22
FLINT	6	-21	111	-13	-42
GRAND RAPIDS	8	-27	120	-5	-9
HOUGHTON LAKE	0	-14	28	-25	-12
LANSING	11	-22	110	-12	-22
MARQUETTE	0	-7	8	-4	-4
MUSKEGON	2	-23	58	-30	-10
S. STE. MARIE	0	-7	6	-2	-2
MINN. DULUTH	0	-7	0	-10	-4
INTERNATL FALLS	0	-11	3	-21	-7
MINNEAPOLIS	23	-13	73	-57	-15
ROCHESTER	19	-12	62	-50	-2
ST. CLOUD	8	-17	43	-38	-25
MISS. JACKSON	100	-11	931	132	66
MERIDIAN	97	-11	846	73	5
MO. COLUMBIA	48	-21	193	-156	-133
KANSAS CITY	60	-10	208	-125	-133
ST. LOUIS	57	-26	357	-77	-54
SPRINGFIELD	67	-7	309	-55	-79
MONT. BILLINGS	27	-7	37	-17	-23
GLASGOW	30	-9	46	-12	-31
GREAT FALLS	15	-0	21	-2	-10
HAVRE	24	-4	32	-21	-21
HELENA	13	-3	16	-2	-6
KALISPELL	11	-5	17	-11	-17
MILES CITY	50	-12	75	-38	-20
MISSOULA	12	-5	33	-21	-28
NEBR. GRAND ISLAND	36	-24	98	-139	-165
LINCOLN	49	-17	153	-129	-177
NORFOLK	36	-17	91	-115	-155
NORTH PLATTE	32	-14	48	-124	-92
OMAHA	39	-27	126	-176	-124
VALENTINE	18	-23	35	-96	-108
NEV. ELY	4	-4	5	-11	-48
LAS VEGAS	154	-14	803	-39	-345
RENO	14	-2	48	-9	-83
WINNEMUCCA	41	-22	74	-26	-43
N.H. CONCORD	0	-15	20	-27	-93
N.J. ATLANTIC CITY	49	-3	189	-21	-21
TRENTON	39	-20	162	-49	-80
N. MEX. ALBUQUERQUE	88	-6	298	-29	-117
ROSWELL	102	-7	486	-14	-100
N.Y. ALBANY	2	-32	38	-85	-99
BINGHAMTON	3	-16	32	-36	-58
BUFFALO	1	-24	36	-45	-32
NEW YORK	40	-21	128	-87	-150
ROCHESTER	3	-28	60	-50	-45
SYRACUSE	0	-32	34	-72	-122
N.C. ASHEVILLE	40	-9	287	-63	-25
CHARLOTTE	66	-20	519	-40	-20
GREENSBORO	49	-28	362	-44	-131
HATTERAS	62	-14	412	-38	-114
RALEIGH	70	-7	491	-84	-40
WILMINGTON	74	-23	541	-67	-96
N. DAK. BISMARCK	8	-19	11	-71	-10
FARGO	17	-11	33	-52	-10
WILLISTON	37	-14	68	-7	-7
OHIO. AKRON-CANTON	11	-26	132	-18	-34
CINCINNATI	30	-32	207	-76	-61
CLEVELAND	9	-26	118	-28	-30
COLUMBUS	16	-29	158	-48	-55
DAYTON	21	-37	181	-60	-94
TOLEDO	15	-27	116	-50	-11
YOUNGSTOWN	9	-20	82	-34	-105
OKLA. OKLAHOMA CITY	65	-31	360	-141	-199
TULSA	81	-20	598	-69	-57
OREG. ASTORIA	0	0	6	6	6
BURNS	1	-11	6	-23	-2
MEDFORD	43	-18	140	-70	-63
PENDLETON	67	-36	150	-61	-128
PORTLAND	30	-18	103	-64	-86
SALEM	32	-25	99	-68	-97
PA. ALLENTOWN	19	-27	94	-77	-147
ERIE	2	-19	60	-11	-6
HARRISBURG	17	-45	109	-144	-150
PHILADELPHIA	46	-20	199	-61	-76
PITTSBURGH	10	-28	99	-63	-53
SCRANTON	14	-21	76	-51	-84
R.I. PROVIDENCE	23	-4	56	-15	-115
S.C. CHARLESTON	99	-1	687	-6	-170
COLUMBIA	90	-15	624	-63	-117
GREENVILLE	59	-25	448	-37	-166
S. DAK. ABERDEEN	14	-18	39	-65	-98
HURON	22	-19	47	-92	-110
RAPID CITY	10	-25	13	-94	-51
SIOUX FALLS	18	-25	48	-106	-142
TENN. CHATTANOOGA	71	-17	457	-47	-53
KNOXVILLE	57	-27	375	-111	-91
MEMPHIS	107	-1	715	-71	-155
NASHVILLE	77	-16	455	-55	-51
TEXAS. ABILENE	95	-24	759	-25	-48
AMARILLO	60	-22	248	-132	-270
AUSTIN	120	-6	1109	-108	-74
BEAUMONT	113	-6	958	-12	-59
BROWNSVILLE	158	-28	1874	-299	-273
CORPUS CHRISTI	134	-6	1330	-28	-82
DEL RIO	139	-5	1218	-52	-191
EL PASO	117	-1	674	-19	-180
FORT WORTH	107	-16	777	-8	-1
GALVESTON	114	-6	1024	-1	-25
HOUSTON	124	-5	1176	-156	-142
LUBBOCK	55	-42	418	-30	-206
MIDLAND	107	-7	690	-30	-54
SAN ANGELO	105	-21	645	-276	-16
SAN ANTONIO	127	-2	1022	-49	-64
VICTORIA	141	-15	1210	-90	-70
WACO	109	-21	943	-29	-41
WICHITA FALLS	86	-43	643	-141	-128
UTAH. SALT LAKE CITY	61	-19	128	-3	-45
VT. BURLINGTON	0	-22	33	-39	-75
VA. LYNCHBURG	44	-20	262	-39	-144
NORFOLK	64	-15	369	-17	-174
RICHMOND	72	-4	399	-17	-109
ROANOKE	38	-20	268	-3	-68
WASH. QUILLAYUTE	0	0	10	10	10
SEATTLE-TACOMA	9	-2	50	-42	-48
SPOKANE	54	-38	125	-83	-121
WALLA WALLA	94	-55	227	-94	-169
YAKIMA	52	-27	134	-50	-101
W. VA. BECKLEY	13	-17	90	-27	-53
CHARLESTON	31	-28	258	-64	-55
HUNTINGTON	25	-38	207	-129	-132
PARKERSBURG	29	-33	301	-13	-19
WIS. GREEN BAY	3	-19	40	-36	-19
LACROSSE	19	-23	109	-53	-26
MADISON	7	-21	37	-64	-58
MILWAUKEE	3	-20	34	-42	-33
WYO. CASPER	16	-2	19	-30	-40
CHEYENNE	1	-16	1	-35	-54
LANDER	19	-3	24	-2	-41
SHERIDAN	17	-1	17	-30	-7





National Agricultural Summary

June 21-27

HIGHLIGHTS: Persistant wet weather again delayed fieldwork in the Southern Plains. Further north, farmers took advantage of drier weather to catch up on field activities. Cooler-than-normal temperatures, expecially in the Corn Belt, slowed crop development. Heavy rain, wind, and hail damaged some fields in Texas and delayed the winter wheat harvest. Farmers had 4 to 7 days suitable for fieldwork in all regions except the southern Plains, where rain limited the number of days available to less than 4. Soil moisture supplies were mostly adequate to surplus in all areas except North Dakota, Georgia, Alabama, Tennessee, New Mexico, and parts of southern Texas, where supplies were rated short to adequate. Winter wheat was in fair to good condition. Harvest reached 14% completion, behind last year and the average. Spring wheat was 12% headed, well behind the average of 37%, due to the late, cool spring. Corn planting was virtually finished. The crop condition rated fair to good. Soybean planting moved to 91% completion, 3 points behind average. Wet conditions delayed planting in Kansas, which was 45 points behind normal. Soybean planting was 82% finished compared with the average of 96%. Progress lagged by 30 points in Kansas and Oklahoma due to almost continuous rainfall. Cotton planting was virtually finished; 32% of the acreage was squaring. Hail destroyed some fields in Texas. Peach harvests became more widespread. Summer vegetable harvesting moved northward. Pastures and ranges were in fair to mostly good condition, as were livestock.

SMALL GRAINS: Winter wheat continued in fair to good condition, although wet conditions promoted weed and disease problems. Harvesting in the 15 major producing States was 14% finished, lagging last year and average. Combining continued in the Corn Belt and started in Kansas. Wind, rain, and hail damaged some fields in the western two-thirds of Kansas. The condition of the Nebraska crop continued to decline as harvest neared and losses from disease became more apparent. Hail destroyed some fields in the northern High Plains of Texas. Harvesting was active in this area as weather permitted. Wet fields slowed combining in many areas of the State. Weeds and grasses presented problems. In the Blacklands, some unharvested fields sprouted.

Spring wheat was 12% headed, well behind last year's rapid development of 44% and the 37% average. The crop remained in fair to good condition.

CORN: Corn planting was virtually finished. Emerged plants were in fair to good condition. Silking was well advanced across the South. Early-planted fields reached the dough stage, and some reached the dent stage. Corn in Georgia was 24% dented. Warmer weather is needed throughout the Corn Belt for good growth and development.

SOYBEANS: Soybean planting in the 18 major producing States reached 91% completion, 4 points ahead of 1981 but 3 points behind average. Wet conditions again delayed progress in Kansas, where planting was only 40% finished compared with the average of 85%. Missouri farmers were also behind--planting was 73% completed, 19 points behind normal. Planting of double-cropped soybeans gained momentum as small grains were harvested.

SORGHUM: Sorghum planting in the 7 major producing States was 82% completed, behind last year's 92% and the 96% average. Progress was as much as 30 points behind schedule in Kansas and Oklahoma due to the wet conditions. Scattered harvesting started in areas of Texas. Heavy rains washed out some late-planted fields in the Texas High Plains.

COTTON: Cotton planting was virtually finished. In the 14 major producing States, 32% of the acreage squared. Plants were in fair to good condition. Heavy rains and hail severely damaged or destroyed many fields in the southern High Plains of Texas. Replanting will be necessary throughout the area. In other growing areas, the crop bloomed and started setting bolls.

OTHER CROPS: Peanut planting in Texas was 74% completed, lagging the average progress of 88%. Wet fields slowed planting in the Cross Timbers area. Some washed out fields were replanted. In south-central Texas, producers planted fields under dry conditions. Rain is needed for good germination and growth. The crop was in fair to good condition in the Southeast. Over a third of the fields in Georgia pegged.

Setting of the 1982 tobacco crop neared completion. Growers cultivated and sidedressed fields. Harvesting gained momentum in Georgia, reaching 16% completion. Drier weather was less conducive to disease problems.

Rice was in fair to good condition. Warmer weather aided the development of plants.

Hay harvests became more widespread as weather permitted. Wet conditions lowered the quality of cut hay in many areas.

FRUITS AND NUTS: The peach harvest was 58% complete in Georgia, 57% in North Carolina, and 33% in South Carolina. Tart cherry harvesting in Michigan was expected to begin about July 1. Cranberries bloomed in Massachusetts. The New York strawberry harvest was in full swing. Florida's citrus groves were in very good condition with adequate mositure supplies. New crop fruit sized well. The Valencia orange harvest was seasonally slow. Arizona's citrus groves were in good condition. California growers harvested apricots, avocados, figs, grapes, nectarines, plums, Freestone peaches, and grapefruit. Almonds and walnuts sized well. Dry conditions were combatted by irrigation in Texas citrus groves. Peaches in the Low Plains area received some hail damage. The normal summer drop continued for pecan trees.

VEGETABLES: The summer vegetable harvest was active in New Jersey, although warmer weather is needed for good growth. Florida's vegetable shipments declined 21% from the previous week, although volume increased for sweet corn and okra and held steady for cucumbers. The South Carolina tomato harvest passed the half-way mark. California's strawberry harvest was active in the central coast and Oxnard areas. Producers in California also harvested a wide variety of other vegetables. In Texas hail damaged or destroyed some vegetable fields.

PASTURES AND LIVESTOCK: Pastures and ranges were in mostly good condition, although cool weather slowed growth in many areas. Most regions had ample soil moisture for a lush growth. Livestock were in fair to mostly good condition.

CROP PROGRESS

FOR WEEK ENDING JUNE 27

WINTER WHEAT
% HEADED

	1982	1981	AVG.
CALIF	100	100	NA
COLO	99	94	98
IDAHO	74	68	78
ILL	100	100	100
IND	100	100	100
KANS	100	100	100
MO	100	100	100
MONT	35	80	70
NEBR	100	100	100
OHIO	100	100	100
OKLA	100	100	100
OREG	97	100	NA
S DAK	88	100	98
TEX	100	100	NA
WASH	98	100	93
15 STATES	96	98	NA
EXCL. STATES WITH NA	95	97	97

THESE 15 STATES PRODUCED 88% OF THE 1981 WINTER WHEAT CROP.

NA - NOT AVAILABLE

WINTER WHEAT
% HARVESTED

	1982	1981	AVG.
CALIF	50	60	NA
COLO	0	NA	NA
IDAHO	0	0	0
ILL	20	30	27
IND	7	13	7
KANS	2	50	15
MO	21	28	35
MONT	0	0	0
NEBR	0	10	4
OHIO	0	0	0
OKLA	25	95	75
OREG	0	0	NA
S DAK	0	0	0
TEX	50	81	70
WASH	0	0	0
15 STATES	14	NA	NA
EXCL. STATES WITH NA	14	45	30

THESE 15 STATES PRODUCED 88% OF THE 1981 WINTER WHEAT CROP.

NA - NOT AVAILABLE

COTTON
% SQUARING

	1982	1981	AVG.
ALA	52	66	39
ARIZ	75	90	77
ARK	73	45	55
CALIF	5	30	NA
GA	71	85	80
LA	74	64	50
MISS	78	88	66
MO	48	27	33
N MEX	35	40	NA
N C	43	36	NA
OKLA	0	0	5
S C	87	91	86
TENN	55	34	37
TEX	16	30	NA
14 STATES	32	41	NA
EXCL. STATES WITH NA	62	60	52

THESE 14 STATES PRODUCED 99% OF THE 1981 COTTON CROP.

NA - NOT AVAILABLE

SOYBEANS
% PLANTED

	1982	1981	AVG.
ALA	88	92	91
ARK	86	79	86
GA	88	87	89
ILL	98	92	98
IND	99	80	99
IOWA	98	100	100
KANS	40	75	85
KY	85	64	82
LA	93	94	94
MICH	100	99	98
MINN	99	99	99
MISS	92	93	91
MO	73	74	92
NEBR	95	100	98
N C	79	87	88
OHIO	100	73	95
S C	85	90	91
TENN	88	74	86
18 STATES	91	87	94

THESE 18 STATES PRODUCED 95% OF THE 1981 SOYBEAN CROP.

SPRING WHEAT
% HEADED

	1982	1981	AVG.
IDAHO	28	42	46
MINN	17	59	50
MONT	0	20	25
N D	5	32	27
S DAK	34	83	62
5 STATES	12	44	37

THESE 5 STATES PRODUCED 92% OF THE 1981 SPRING WHEAT CROP.

SORGHUM
% PLANTED

	1982	1981	AVG.
COLO	74	86	89
KANS	65	85	95
MO	77	69	91
NEBR	97	100	98
OKLA	65	95	95
S DAK	82	95	98
TEX	94	98	98
7 STATES	82	92	96

THESE 7 STATES PRODUCED 92% OF THE 1981 SORGHUM CROP.

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by SRS State Offices in cooperation with the National Weather Service.

ALABAMA: Temperatures averaged at or below normal. Rainfall varied from 0 to near 8.00 in. in Mobile.

Soil moisture short to adequate. Fieldwork: 5.2 days. Corn silked 72%, 72% 1981, 49% average. Sorghum planted 92%. Soybeans planted 88%, 92% 1981, 91% average. Wheat harvested 88%. Cotton squaring 52%, 66% 1981, 39% average. Conditions: Cotton, peanuts, wheat, livestock, pastures, corn, and sorghum mostly good. Activities: Planting sorghum and soybeans; cultivating field crops; controlling pests on fruit, vegetables, and crops; harvesting hay, wheat, peaches and early vegetables.

ALASKA: Sunny, warm and dry week as strong high pressure ridge dominated the region. Temperatures were 6 to 8° warmer than normal with daytime highs reaching into the mid 80's, but with nighttime lows dropping back to near normal levels. Little precipitation was reported though seasonal totals remain from a 0.25 to 0.75 in. wetter than normal.

Much needed sunshine and warmer temperatures ended the week promoting crop growth throughout Railbelt. Farmers had up to 7 days field activity for haying, spraying herbicides, and cultivating. Small grain ranged in heights of 5 to 10 in. compared with 6 to 24 in. a year earlier. Oats and barley were 100% in preboot stage. Potatoes averaged from not yet emerged to 5 in. Haying in full swing by weeks end. Topsoil and subsoil moisture supplies generally adequate.

ARIZONA: Sunny warm days, clear cool nights. No precipitation reported. Average temperatures 3° below normal to 3° above.

Squaring in 75% of the cotton fields, behind last year's 90%. Flowering, boll setting increasing. Barley harvest finished except the southeast area. Wheat combining winding down except the southeast where harvest gaining momentum. Corn for grain, sorghum seasonal progress. Sugarbeet harvest appoaching completion. Alfalfa baling seasonal. Dry onion bagging, carrot digging finished by July 2. Green onions, seasonal progress. Harvesting processing potatoes completed by July 5. Grape harvest full swing western area, gaining momentum central area. Cantaloups, honeydew harvest peaking in western area, beginning in central area. Watermelon harvest in full swing. Grapefruit picked on demand. Citrus groves good condition. Ranges deteriorating due to increasing temperatures, no summer rainfall. Northern, north central, southeastern ranges fair to good condition, remainder state poor. Livestock fair to good shape. Water supplies short to adequate.

ARKANSAS: Mild, wet week. Highest temperature 93°, lowest 52°. All departures from normal ranged from -6 to -1°. Most rainfall 2.41 in., least 0.21 in.

Five days suitable for fieldwork. Soil moisture adequate to surplus. Crop growth moderate to rapid. Crops in good condition. Soybeans planted 86%, 79% 1981, 86% average; emerged 78%, 63% 1981, 72% average. Cotton squaring 73%, 45% 1981, 55% average. Wheat harvested 87%, 94% 1981, 86% average. Oats harvested 92%, 93% 1981, 89% average. Hay rain damaged. Pastures good to excellent. Tomato and peach harvests increasing in volume.

CALIFORNIA: The week was generally on the cool side with most stations reporting temperatures 2 to 5° below normal. The cool temperatures were the result of cloudy and showery conditions that prevailed most of the week. Tropical moisture combined with the daytime heating to set off the showers and thundershowers in the Sierra and at times in the Valley and coastal sections.

Harvesting of small grains continues. Winter wheat 50% harvested, 60% last year. Rice and cotton development slower than normal. Five percent of cotton squaring, 30% previous year. Cultivation and irrigation of cotton active. Rice herbicide application active with crop in good shape. Sugarbeets growing well and harvest of overwintered fields winding down. Small grain fields being prepared for second crop of corn, milo and dry beans. Alfalfa hay harvest active with fields in second and third cutting. Safflower blooming. Tilton apricots picked for canning. Hass avocados dominate market. Mission (black) figs packed. Thompson Seedless grapes underway. Firebrite, Early Sungrand nectarines moving. June Lady Freestone peaches picked with good color. Santa Rosa plums harvested. Desert grapefruit finishing. Tree ripe lemons picked. Valencia orange eating quality very good. Almonds, walnuts sizing well in cooler temperatures. Artichokes, asparagus seasonally light. Broccoli heavy supply, cantaloup harvest decreased Imperial Valley, increased Palo Verde Valley. Early cantaloups sizing well San Joaquin Valley. Carrot harvest finished Desert, active San Joaquin-Salinas Valleys. Cauliflower harvest moderate. Celery harvest active Oxnard, increasing Santa Maria. Lettuce good volume central coast. Onion harvest continues San Joaquin Valley, very good quality. Spring potato harvest at peak Kern District. Strawberry harvest active central coast. Market tomatoes nearly finished Desert; increasing San Joaquin Valley, south coast. Processing tomato harvest continued Desert. Harvest watermelons active Desert. Movement livestock summer ranges, pastures complete many areas. Foothill ranges dry, fire danger increasing. Water supplies adequate.

COLORADO: Showers and thunderstorms daily, Tuesday through Friday, East with locally heavy amounts of hail and rain on Thursday and Friday. Moisture west of the divide was light. Temperatures in Arkansas Valley were 3 to 6 degrees below normal, elsewhere temperatures 2 to 4 degrees below normal.

Prospects for most crops improving as recent moisture has offset dry conditions earlier in season. Emergence of spring grains virtually complete. Barley, 46 percent headed, and 8 percent turning color. Sugar beets, 81 percent thinned. Dry beans, 87 percent planted and 76 percent emerged. Corn doing well, and has reached an average height of 12 inches. Sorghum now in good condition as a result of recent moisture, with 74 percent planted and 51 percent emerged. Hay harvest slowed by frequent rains during past few weeks. Winter wheat crop is in fair to good condition, with 56 percent turning color and 3 percent ripe. Moisture levels mostly adequate. Five days suitable for fieldwork. Livestock in good condition.

FLORIDA: Heavy rains brought flooding, portions of central Florida. Almost daily showers, thunderstorms shifted to Panhandle areas by the 27th; drier air returned to the Peninsula. Clouds, showers kept afternoon temperatures slightly below normal but nightime readings were well above normal.

Soil moisture excessive in south, east coast, mostly adequate other areas. Harvesting early corn increasing, late corn good condition. Peanuts, early soybeans growing well. Soybean planting continues. Hay cutting delayed due to frequent rains. Sugarcane growing well. Tobacco harvest active. Pastures making good growth with abundant rainfall. Heavy rains caused flooded conditions in low areas and saturated soils affecting quality of grass. Pasture condition overall rated good to excellent. Cattle condition mostly good. Citrus groves very good condition. Moisture adequate. Abandant new growth. New crop fruit size progreassing very well. Valencia orange harvest very slow. Only a few fresh fruit houses packing grapefruit. Hot, humid weather prevailed most of week in vegetable areas. Thunderstorms occurred almost daily all areas. Rainfall locally heavy. Daytime highs mostly in 90's, nightime lows in 70's. Harvest complete or nearing completion for most crops. Total shipments decreased 21% from previous week. Cabbage harvest complete. Volume increased sweet corn, okra; about steady cucumbers. Volume declined all other vegetables still under harvest. Watermelon, sweet corn harvest should continue into July.

GEORGIA: Moderate rainfall, slightly below normal temperatures. Rainfall near 1.00 in. south to barely 0.25 in. north, mainly from showers 21st and 22nd. Little day to day temperature change, averaging 1 to 2° below normal. A rather wet 26th and 27th. Rainfall averaged 0.50 to 0.75 in. Temperatures averaged 3 to 5° below normal.

Soil moisture 32% short, 51% adequate and 14% surplus. West central section shortest soil moisture. Four days suitable for fieldwork. Planting, haying, harvesting, and spraying continue active. Corn 29% fair, 60% good and 9% excellent; 86% silked, 90% last year; 57% dough stage, 61% last year; 24% in dent stage, 21% last year. Cotton 23% fair, 67% good, and 8% excellent; 71% squaring, 85% last year, 80% average; 18% setting bolls, 34% last year, 33% average. Peanuts 18% fair, 68% good and 12% excellent; 73% blooming, 81% last year, 84% average; 35% pegging, 44% last year, 49% average. Insect and disease control on peanuts. Sorghum 81% planted, 79% last year, 75% average. Soybeans 20% fair, 72% good, 6% excellent; 88% planted, 87% last year, 89% average; 6% blooming, 8% last year. Tobacco 22% fair, 67% good and 8% excellent; 16% harvested, 11% last year and average. Wheat 91% harvested, 93% last year and average. Watermelons 7% poor, 37% fair, 49% good, 7% excellent; 23% harvested, 31% last year and 22% average. Peaches 13% very poor, 13% poor, 32% fair, 38% good; 58% picked, 48% last year, 53% average. Apples 10% very poor, 24% poor, 42% fair, 22% good. Hay crops 26% fair, 61% good, 9% excellent. Pastures 25% fair, 65% good, 8% excellent. Cattle and hogs good.

HAWAII: Weather favorable. Few light showers but most crop areas were dry. Irrigation frequent to maintain fair to good crop development. Water level some irrigation reservoirs declining slightly but not affecting irrigation schedule. Vegetables: Supplies adequate. Generally moderate to heavy. Bananas: Supplies light. Rains were beneficial some areas. Papayas: Supplies light. More rainfall needed in some areas where irrigation not available. Pineapples: Harvesting active and increasing. Sugar: Steady harvest. Pastures: Some areas beginning to dry. Most areas generally fair to good.

IDAHO: High pressure dominated. Temperatures were warm and precipitation was below normal in many locations. Average temperatures ranged from 2 to 7° above normal in the southern portion of the State while in the north, Moscow was 13° above normal. Hot spot in the State was Lewiston with 99° while the lowest was 37° at Stanley. Precipitation totals were again heaviest in the southeast with Dubois reporting the most with 1.04 in. Other locations ranged from a trace to 0.40 in.

Crop outlook good overall. Small grains in north stressed due to lack of rain. Potatoes off to good start with 97% emerged, 9% closing rows. Last year had 90% emerged, 11% closing rows. Winter wheat 74% headed, 68% in 1981, 82% average. Spring wheat 28% headed, 42% last year. Barley 33% headed, 44% 1981. Dry beans 95% emerged, 97% last year. Corn growing rapidly. First cut alfalfa 54% complete, 60% in 1981.

ILLINOIS: Temperatures 3 to 9° below normal. Precipitation light to heavy, 0.08 to 1.70 in.

Winter wheat 4% excellent, 68% good, 26% fair, and 2% poor; 100% headed; 70% ripe; 20% combined. Corn 17% excellent, 71% good, 12% fair. Soybeans 98% planted, 92% 1981, 98% average. Soybeans 5% excellent, 75% good, 19% fair, 1% poor. Alfalfa 96% first crop cut; red clover 80% cut. Oats 90% headed; 60% filled; 20% turning yellow. Pastures 14% excellent, 83% good, 3% fair. Soil moisture 8% short, 86% adequate, 6% surplus.

INDIANA: Cool then warm and humid. Temperatures averaged 2° below normal and ranged from 45 to 89°. Showers averaged 0.20 to 0.50 in., heaviest west central. Sunshine 70 to 93% of possible.

Fieldwork averaged 5 days. Topsoil and subsoil moisture rated mostly adequate. Wheat 7% combined, 1981 13%, average 7%. Wheat 30% ripe, 1981 35%, average 40%. Wheat 80% turning color, 1981 90%. Corn 35 in. high, 1981 17 in., average 26 in. Soybeans 9 in. high, 1981 4 in., average 8 in. Soybeans 99% planted, 1981 80%, average 99%. Corn and soybeans fair to mostly good condition. Alfalfa 95% cut first time, 1981 85%, average 95%. Tobacco 85% set, 1981 95%.

IOWA: A cool, dry week. Temperatures averaged about 2° subnormal and precipitation was spotty, falling during the latter half week. A few localities reported heavy rains.

Topsoil moisture: 12% surplus, 77% adequate, 11% short. Subsoil moisture: 24% surplus, 76% adequate. Corn acreage emerged: 98%, last year 100%, normal 100%. Soybean acreage planted: 98% complete, last year 100%, normal 100%. Soybean acreage emerged: 90%, last year 100%, normal 100%. Oat acreage headed: 80%, last year 98%, normal 90%. First crop alfalfa hay harvested: 90%, last year 98%, normal 96%. First crop clover harvested: 65%, last year 78%, normal 76%. Fieldwork: 6.4 days suitable. Crop conditions: Corn and soybeans, fair to good; pasture, wheat, oats and hay mostly good. Livestock good condition.

KANSAS: Precipitation averaged 1.11 to 1.31 in. northwest and southeast to 0.47 in. northeast. Substantial to locally heavy rains in the 1.50 to 2.50 in. range fell over spotty areas of the State most of the week. Temperatures averaged 71° northwest to 74 to 77° elsewhere and from 1° below normal central and southwest.

Wheat harvest moving beyond test cutting stage as weather permits. Some wind, rain and hail damage occurred scattered areas mostly western two-thirds. Harvest this year 2%, last year 50%, average 15%. Corn planting nearing completion at 98% this year, 100% last year and average of 100%. Sorghum planting behind schedule, some replanting necessary where rains washed out stands. This year 65% complete, last year 85%, average 95%. Soybean planting made moderate progress at 40% complete while last year completion had reached 75% and compares with the average of 85%.

KENTUCKY: Temperatures averaged several degrees below normal. Temperatures returned to or slightly above normal by end of week. Precipitation mainly 0.25 in. or less, with southeast measuring 0.50 to 1.00 in.

Days suitable for fieldwork averaged 5.6. Soil moisture 24% short, 75% adequate and 1% surplus. Shortage in west and southern counties of central. Soybeans 85% planted, last year 64%, average 82%. Planting double crop beans very active. Corn growing well, average height of 45 in. and beginning to tassel. Burley 25% foot or better in height. Blue Mold slowed by dry weather. Wheat 60% harvested, ahead of last year and average. Dry weather good for haying. Pastures good but need rain.

LOUISIANA: Rainfall averaged 0.46 to 4.15 in. Temperatures normal to 3° below normal.

Soil moisture adequate. Days suitable: 4.4. Corn silked 93%, 86% 1981, 81% average; dough stage 53%, 65% 1981, 36% average; mature 3%, 26% 1981; condition fair to good. Cotton squaring 74%, 64% 1981, 50% average; setting bolls 3%, 18% 1981; condition good. Rice headed 17%, 23% 1981, 25% average; condition fair to good. Sorghum planted 98%, 97% 1981, 93% average; emerged 95%, 92% 1981, 86% average; headed 36%, 39% 1981; condition fair to good. Soybeans planted 93%, 94% 1981 and average; emerged 86%, 87% 1981 and average; flowering 3%, 7% 1981, 5% average; condition fair to good. Sweetpotatoes transplanted 98%, 94% 1981 and average; condition good. Wheat harvested 99% 1982 and 1981, 98% average. Sugarcane rated good. Pecans rated fair. Peaches harvested 43%, 64% 1981. Vegetables rated fair to good. Hay first cutting 94%, 84% 1981. Pastures rated fair to good; livestock good.

MARYLAND AND DELAWARE: Temperatures averaged 4° below normal. Highs averaged in low 80's and minimums were in the upper 50's to low 60's. Precipitation was minimal with Snow Hill receiving the most precipitation at 0.49 in. Weekend weather, the 26th and 27th, were sunny and warm with highs in the upper 80's and lows in the low 60's with no rain.

Maryland: Over 6 days suitable for fieldwork. Soil moisture adequate to surplus. Wheat 90% turned, 95% last year. Rye 100% turned, 95% last year. Oats 85% turned, equal to last year. Wheat 10% harvested, 25% last year. Rye 30% harvested, 20% last year. Barley 70% combined, 75% last year. Alfalfa hay 95% first cutting, 40% second cutting done, 90 and 15% respectively cut last year. Other hay 90% cut for first time, 20% cut for second time. Last year other hay was 75% cut for the first time and just beginning to be cut for the second time. Soybeans 85% planted, 90% last year, normally 80% harvested. Tobacco 90% planted, 95% last year. Peas being harvested. Oats 5% turned, equal to last year.

Delaware: All small grains turned. Wheat 5% harvested, 20% last year. Barley 95% combined, 85% last year. All rye still to be harvested. Soybeans 90% planted, equal to last year but normally 80% planted. Alfalfa and other hay all cut for first time. Alfalfa 25% cut second time, 20% last year. Second cutting of other hay yet to begin. Pea harvest in full swing.

MICHIGAN: Another cool week with temperatures averaging 5 to 8° below normal. Temperatures remained cool until late in week then reached mid-70's to low 80's. Precipitation was mostly light except in west central, parts of east central and Upper Peninsula.

Field activity was again slowed by wet and cool weather. Statewide nearly 4 days were suitable for fieldwork. Dry bean planting 85% complete, 95% last year and average. Winter wheat development behind last year and normal with 10% turning yellow, 15% last year and 32% normal. Oat heading advanced to 35%, 55% last year and 48% average. First cut hay 65% in, last year 70% and average 75%. Strawberry picking made good progress with 60% harvested behind last year's 75%. Cold nights and cool days holding pasture and hay regrowth down. Vegetables still developing near normal. Tart cherry harvest expected to start about July 1 in southwest.

MINNESOTA: Good rain across central part of State alleviated some of moisture shortage. Rain not widespread, though, and most of the State remains dry and in need of more rain, topsoil moisture rated 24% short and 76% adequate. Crops made better growth with some warmer weather but still behind normal due to mostly cooler than normal temperatures. Cumulative growing degree days about 25% behind normal. Jointing: Spring wheat 73%, 1981 95%, normal 81%, oats 78%, 1981 97%, normal 85%, barley 73%, 1981 97%, normal 81%. Heading: Spring wheat 17%, 1981 59%, normal 50%, oats 20%, 1981 73%, normal 58%, barley 27%, 1981 69%, normal 58%. Emerged: Soybeans 94%, 1981 99%, normal 99%. Average height: Field corn 14 in., 1981 17 in., normal 22 in.; soybeans 5 in., 1981 7 in., normal 8 in.; sunflowers 5 in., 1981 9 in., normal 5 in.

MISSISSIPPI: Temperatures 1 to 5° below normal except for coastal area with slightly above normal. Extremes: 56 to 95°. Showers and thunderstorms numerous throughtout the week. Greatest 24-hour rainfall 2.03 in.

Soil moisture adequate most areas. Fieldwork: 5.3 days suitable. Wheat harvest and soybean planting near completion. Wheat 95% harvested, 97% last year. Soybeans 92% planted, 93% last year, 91% average; condition good to fair. Cotton 78% squaring, 88% last year, 66% average; 13% blooming, 30% last year, 16% average; condition good,. Corn 51% silked, 73% last year; 25% in dough stage, 38% last year. Sorghum 94% planted, sweetpotatoes 90%. Hay 50% harvested, peaches 27%, watermelons 6%. Rice condition good and pasture condition good.

MISSOURI: Temperatures averaged 4 to 6° below normal. Precipitation was light.

Fieldwork: 4.6 days suitable. Grain sorghum 77% planted, last year 69%, normal 91%. Single crop soybeans 78% planted, last year 73%, normal, 92%. Double crop soybeans 45% planted, last year 29%. Wheat 99% turning color, last year 100%, normal 100%. Wheat 21% harvested, last year 28%, normal 35%. Alfalfa hay-1st cutting 87% harvested, last year 100%, normal 93%. Alfalfa hay-2nd cutting 16% harvested, last year 26%, normal 28%. Other hay 49% harvested, last year 56%. Cotton 48% squared, last year 27%, normal 33%. Condition of corn and cotton fair to good. Condition of pasture mostly good. Supply of topsoil moisture adequate to surplus.

MONTANA: Mild week with warm daytime temperatures and cool nights. Temperatures ranged 2 to 7° above normal. Precipitation moderate to heavy in west and southwest, light elsewhere.

Topsoil and subsoil moisture adequate. Days suitable for fieldwork: 6. Winter wheat condition fair to good. Percent headed compared with last year and normal: 35, 80, 70. Spring wheat percent headed: 0, 20, 25; barley 1, 15, 25; oats 1, 20, 25. Spring wheat, barley and oats good condition. Corn and sugarbeets fair, potatoes fair to good. Sugarbeet thinning 60%. First cutting alfalfa hay compared with last year and average: 10, 20, 40; wild hay 5, 5, 15.

NEBRASKA: Precipitation: Widespread rainfall, heavy at midweek and end. At midweek several

Panhandle locations in excess of 2.00 in. At end of week local amounts of 3.00 to 6.00 in. in south central and southeast. Temperatures: 1 to 4° below normal.

Sorghum 97% planted, 100% last year and normal; emerged 80%, 100% last year and 98% normal. Soybeans 95% planted, 100% last year and normal; emergence 75%, 100% last year and 98% normal. Wheat mostly fair to good. Wheat condition continued to move lower as the crop neared harvest and losses from disease became more apparent. Turning 60%, 90% last year and 75% normal. Harvested 0%, 10% last year, 4% normal. First cutting of alfalfa 90% harvested, 100% last year and 98% normal. Quality of harvested crop significantly lower due to poor drying conditions. Pasture and range feed mostly adequate to surplus. Topsoil moisture adequate. Subsoil moisture mostly adequate to surplus. Days suitable for fieldwork: 5.9.

NEVADA: Afternoon and evening thundershowers most areas through midweek. Most intense rainfall central and eastern areas. Temperatures above average, except Reno which was 1° below normal. Afternoon high equaled or exceeded 100°, in the south, 80's and lower 90's other areas. High pressure covered State at weekend. Cold front moving toward west brought gusty winds to that area 26th.

Alfalfa hay harvest progressing northward. Warmer weather favorable for crop growth and development. Ranges benefitted from recent showers.

NEW ENGLAND: Temperatures were near normal in southern interior, cooler than normal elsewhere. Most precipitation occurred first 4 to 5 days of the period in north and first 2 to 3 days elsewhere. Greatest amounts in northwestern Maine and interior VT and NH; least amounts near coast.

First cuttings of hay being made, but behind normal because cool, damp weather has interfered with curing. Hay becoming overripe with its quality sub-normal. Potatoes in Aroostook County, ME from a few inches to 1.5 feet tall. The crop looks good. Growers cultivating and spraying. Massachusetts cranberries beginning to bloom -- early varieties up to 30%, later varieties just starting. Crop about 10 days behind normal. Warm-season vegetable development about 1.5 to 2 weeks behind normal because of cool weather and excessive soil moisture.

NEW JERSEY: Temperatures averaged 3 to 4° below normal. Extremes: 42° at Charlotteburg on 24th and 90° at Downstown on 27th. Rainfall averaged 0.47 in. north, 0.13 in. central and 0.02 in. south. Heaviest 24-hour total 0.76 in. at Newton on 22nd and 23rd. Estimated soil moisture, in percent of field capacity averaged: 83 north, 65 central and 41 south. Four inch soil temperature averaged: 66 north, 69 central and 69 south.

Fieldwork: 5 to 6 days suitable. Fieldwork active as soils dry. Summer vegetable harvest active. Blueberry harvest general. Strawberry harvest nearing completion. Barley combining advancing. Wheat maturing. Oats in head. Soybean planting following grain harvest. Hay making active.

NEW MEXICO: Average temperatures were a few degrees below normal over the eastern Plains and near normal over central and western areas.

Open weather prevailed in most areas allowing outdoor activities to progress unhampered. Some areas received severe hail damage with some fields totally destroyed and others with only moderate damage. Wind damage was light to moderate. Soil moisture mostly short. Cotton in good condition. Hail damage to cotton was severe in some areas on the eastside of the State. Alfalfa remains in good condition. The first cutting approximately 95% complete. Harvest of wheat and barley progressing. Hail and high moisture content of the grain causing some problems. Grain sorghum and corn in good condition. Pecans in good condition and progressing about normal. Ranges in mostly fair condition and showing some improvement due to recent showers. Cattle and sheep in good condition. Cotton squaring 35%, 40% 1981.

NEW YORK: Cool temperatures, frequent showers slowed plant growth and fieldwork. Corn planting nearing completion, some fields yellowing. Disease problems increasing in wheat. Oat condition generally good. Fourth bad haying week. First cutting alfalfa 30% done, 40% 1981, 56% average. Clover-Timothy hay 20% done, 30% 1981, 39% average. Grass silage 42% in, 51% 1981, 65% average. Hudson Valley apples in good condition. Strawberry harvest in full swing. Upstate lettuce harvest underway. Long Island cabbage harvest beginning. Upstate snap bean planting well along.

NORTH CAROLINA: Temperature: 2 to 4° below normal. Precipitation: near 0 in the west and north to 1.75 in. At Wilmington.

Fieldwork: 4.5 days suitable. Soil moisture: 1% short, 63% adequate, 36% surplus. Conditions: Pasture, cotton, peanuts, soybeans, hay, Irish potatoes, sweetpotatoes, and truck crops mostly good; field tobacco fair to mostly good; corn mostly good to excellent; apples poor to mostly fair. Plantings: Sweetpotatoes 91%, 1981 93%, 94% average; sorghum 84%; soybeans 79%, 1981 87%, 88% average; burley tobacco 100%, 1981 99%, 98% average. Harvest: Irish potatoes 33%, 1981 59%, 50% average; wheat 67%, 1981 84%, 70% average; oats 77%, 1981 91%, 78% average; barley 80%, 1981 95%, 83% average; rye 63%, 1981 88%, 78% average; peaches 57%, 1981 35%, 28% average; hay 55%, 1981 63%, 61% average. Phenological stages: Cotton squared 43%, 1981 36%; cotton bloomed 2%, 1981 0; corn silked 39%, 1981 48%. Farm activities: Harvesting small grains, planting soybeans, and cultivating tobacco.

NORTH DAKOTA: Temperatures averaged 3° below normal. Northwest was warmest with average temperature of 65°, northeast coolest with 60°. Extremes: 35° northeast, 92° northwest. Precipitation averaged below normal. Wettest was central which averaged 0.28 in.

Mostly dry, sunny weather helped push crop development but produced significant area with topsoil moisture shortages for the first time in six weeks. Small grains still about 2 weeks behind average in development; condition mostly good to very good. Row crops also behind normal. The percents heading or beyond with last year and average were: Hard red spring wheat 5, 28, 22; durum 2, 24, 17; barley 22, 43, 35; oats 8, 33, 27. The average height of fields in inches with last year and average was: Sunflower 5, 6, 10; corn 8, 8, 11; and soybeans 4, 5, 7. Percent in bloom with last year and average: Potatoes 1, 3, 9; flax less than one-half, less than one-half, 3. Areas with topsoil moisture shortage still less than noraml; most acute in southeast where some small grains showing drought stress. Other areas will also need rain soon.

OHIO: Temperatures climbed to 80's by weekend. Maximum values from 3 to 5° below normal in all but southern sections. Lows from 3 to 7° below normal with lowest readings in mid 40's. Cool weather kept growing degree accumulations down with seven day totals ranging from 97 at Willard and Wooster to over 130 in extreme south. Deviations were from 15 to over 25 below normal. Although rain threatened on many days, precipitation

totals were from 0.50 to more than 0.75 in. below normal. Seven day totals ranged from 0 at several stations to 0.65 in. at Hoytville.

Warmer, drier weather provided stimulus for rapid growth as corn and soybeans began to recover from recent damp, cool conditions. Potato leaf hopper threatening alfalfa stands and soybean fields plagued by weeds. Farm activities included making hay, preparing for winter wheat harvest, cultivating corn and soybeans, spraying pesticides, hauling manure and picking strawberries. Soybeans planted 100%, 73% 1981, 95% average. Wheat headed 100%, 100% 1981, 100% average. Wheat harvested 0%, 0% 1981, 0% average. Alfalfa (1st cutting) 90%, 67% 1981, 90% average. Other hay (1st cutting) 75%, 53% 1981, 80% average. Tobacco transplanted 80%, 87% 1981, 90% average. Oats headed 90%, 82% 1981, 85% average. Days favorable: 5. Pasture condition good. Soil moisture 3% short, 75% adequate, 22% surplus.

OKLAHOMA: Rainfall averaged from 0.48 in. in the east central to 1.89 in. in the south central. Temperatures ranged from 3° below normal in the northeast to 6° below normal in the Panhandle.

Wheat harvest has fallen nearly two weeks behind normal due to recurring rain. Wheat harvesting: 25%, 95% 1981, 75% average. Sorghum up to stand: 45%, 75% 1981, 70% average. Cotton up to stand: 45%, 70% 1981, 90% average. Days suitable for fieldwork: 3.2.

OREGON: Temperatures 5 to 10° above normal. Precipitation light.

Moisture mostly short. Moisture stress in spring crops and winter wheat. Winter wheat 97% headed; 100% last year. Wheat 67% turning color; 67% last year. Barley heading, to begin harvest. First cutting of hay completed; some second cuttings. Grass seed crops suffering from dry weather. Strawberry harvest continues. Cherry harvest started in Wasco County and Willamette Valley. Raspberry harvest started. Moth and mite infestations in apple and pear orchards. Green pea harvest in full swing. Potatoes doing well. Early snap beans blooming. Broccoli harvest begun. Livestock good. Range and pasture fair to good. Rain needed badly.

PENNSYLVANIA: Generally a dry week with average rainfall being just over 0.30 in. This was approximately 0.60 in. below the normal. The rainfall occurred at the beginning and end of the week. Warm days and cool nights caused average temperatures to be 8° below the normal of 71°. Extremes: 88 and 36°.

Five days suitable. Moisture adequate to surplus. Activities: Spraying; making hay and haylage; clipping pastures; harvesting strawberries, cherries, snap beans, and green peas; thinning apples; transplanting tobacco; and planting soybeans. Soybeans 90% planted, same as last year. Tobacco transplanting virtually complete, last year 87%. Barley 14% ripe, last year 22%. Wheat 28% turning yellow, last year 45%. Oats 70% headed, last year 65%. Average corn height 16 in., last year 17 in. First crop alfalfa 64% harvested, last year 71%. First crop Clo-Tim 43% harvested, last year 55%. Second crop alfalfa less than 5% harvested, last year 11%. Quality of hay made mostly fair. Feed from pastures average to above average.

PUERTO RICO: Island average rainfall 0.57 in. or 0.81 in. below normal. Highest weekly total 2.91 in. Temperatures averaged about 81° on Coasts and 74 to 75° Interior Divisions. Extremes: 94 and 59°.

SOUTH CAROLINA: Temperatures varied from hot and muggy to 2 to 3° below normal. Rainfall came as showers and thunderstorms.

Soil moisture adequate. Four workable days. Corn good condition, 79% silked, 86 year ago, 71 average; 28% dough stage, 40 last year, 30 average; 2% mature, 3 a year ago. Cotton condition fair to good, insect attack heavy in some areas. Percent squaring 87, 91 a year ago, 86 average; 16% setting bolls, 25 last year, 16 average. Tobacco fair to good, 62% topped, 67 last year, and 56 average. Percent harvested 4, 3 last year. Soybean planting following small grains held back by wet conditions, 85% planted, 90 last year, 91 average. Coastal Plains picking Redglobes, peach quality good. Overall conditions fair to good. Percent harvested 33, 25 last year, 24 average. Watermelons fair to good, harvest underway at 7% compared to 14 a year ago. Cases of Belly Rot and Gummy Blight reported. Tomatoes good despite several days of potentially harmful rains; 58% of the acreage harvested compared to 80 last year and 59 average. Small grain harvest interrupted by showers, good yields reported; wheat 85% harvested, 97 last year, 93 average.

SOUTH DAKOTA: Cool temperatures remained with averages 3 to 5° below normal despite warming at week's end. Extremes: 92 and 36°. Precipitation light, mostly under 0.50 in. Above average precipitation for year except for extreme east and portions north central.

Six days suitable. Dry weather has reduced disease in small grains. Planting, haying and cultivating major activities. Range and pastures have good to excellent growth and carrying capacity. Sorghum planted 84%, 1981 95%, average 98%. Soybeans planted 98%, 1981 100%, average 100%. Sunflower planted 94%, 1981 98%, average 98%. Flax emerged 94%, 1981 100%. Corn cultivated once 65%, 1981 92%, average 87%. Spring wheat in boot stage or beyond 69%, 1981 100%, average 90%. Oats in boot stage or beyond 78%, 1981 100%, average 93%. Barley in boot stage or beyond 79%, 1981 100%, average 91%. Winter wheat heading 88%, 1981 100%, average 98%. Spring wheat heading 34%, 1981 83%, average 62%. Oats heading 11%, 1981 90%, average 71%. Barley heading 46%, 1981 92%, average 70%. Winter wheat turning color 25%, 1981 69%, average 48%. Rye turning color 22%, 1981 48%, average 41%. Alfalfa harvested 66%, 1981 73%, average 75%.

TENNESSEE: Scattered showers were reported across the State late 21st and 22nd and during the weekend. Temperature highs in the 80's and lows in the 60's, averaging 0 to 4° below normal.

Fieldwork: 5.7 days suitable. Soil moisture 56% short, 43% adequate, 1% surplus. Soybeans 88% planted, 1981 74%, average 86%. Cotton squaring 55%, 1981 34%, average 37%. Corn silking 16%, 1981 17%, average 16%. Wheat harvested 70%, 1981 70%, average 77%. Oats harvested 55%, 1981 64%, average 63%. Pastures fair. Cattle good. Alfalfa second cuttings 65%, 1981 64%, average 58%.

TEXAS: Cold front moved into State during week, triggering scattered thunderstorms, some heavy. Temperatures 3 to 5° below normal Panhandle. Extreme South Texas 3° above normal. Rest of State near normal. Rainfall 0.10 in. below normal West Texas, to 0.50 in. below normal South Texas and Lower Valley. Central Texas 0.10 in. above normal. Remainder of State was 0.50 to 2.50 in. above normal.

Range and livestock: Some pastures across High, Low Plains severe hail damage. Most ranges and pastures across State good to excellent condition; grazing plentiful. Native pastures Trans-Pecos, Edwards Plateau improving with increased moisture supplies, some supplemental feeding con-

tinues. Grasshoppers problem High Plains to the Cross-Timbers. Livestock good to excellent condition. Horn flies problem some areas South Central Texas. Cotton planted 99%, 99% 1981, 99% average. Cotton squaring 16%, 30% 1981. Cotton setting bolls 10%, 17% average. Cotton open bolls 0%, 2% 1981. Rice headed 50%, 60% 1981. Rice turning color 0%, 11% 1981. Sorghum planted all purposes 94%, 98% 1981, 98% average. Sorghum headed 57%, 60% 1981. Sorghum turning color 36%, 40% 1981. Sorghum mature 0%, 12% 1981. Wheat turning color 96%, 98% 1981. Wheat harvested for grain 50%, 81% 1981, 70% average. Oats for grain harvested 66%, 75% 1981, 92% average. Peanuts planted 74%, 72% 1981, 88% average. Soybeans planted 69%, 70% 1981, 88% average. Sunflowers planted 63%, 82% 1981, 86% average.

Crops: Heavy rains, hail take toll many crops across Plains. Many cotton, corn fields severely damaged or destroyed; replanting necessary across most areas. Some wheat fields ready for harvest Northern High Plains lost to hail. Excess moisture problem Plains, parts South Central Texas need rain; crop development spotty. First bale of cotton ginned Hidalgo County on June 23. Crop maturing rapidly South Texas, bolls opening shortly Coastal Bend. Heavy rains, hail extensive damage many fields Southern High Plains, some stands completely washed out or destroyed. Replanting necessary. Seedling disease problem Low Plains. Grasshoppers some fields. Reported condition across the State was 48% of normal with 6% excellent; 18% good; 25% fair; 50% poor; and 1% failure. This compares with 86% of normal last year. Sorghum maturing rapidly Central Texas to Lower Valley; harvest underway scattered areas along coast. Some late-planted fields High Plains washed out by heavy rains. Seedling disease prevalent early stands. Midge problem South Central Texas. Condition across the State was 78% of normal with 7% excellent; 52% good; 38% fair; and 3% poor. This compares with 94% of normal last year. Some corn fields also damaged, destroyed by latest hail storm across High Plains. Some stands South Central Texas also damaged by hail, high winds. Corn Blacklands roasting ear to dent stage. Statewide condition was 87% of normal with 18% excellent; 52% good; 28% fair; and 2% poor. This compares with 88% of normal last year. Wheat harvest active across Northern High Plains where weather conditions permit; recent hail has damaged, destroyed many unharvested fields. Wet fields slowed harvest many areas State; weeds and grasses are problem. Some unharvested fields Blacklands, grain sprouting in heads. Reported condition across the State was 67% of normal with 3% excellent; 29% good; 60% fair; and 8% poor. This compares with 76% of normal last year. Wet fields slowed peanut planting Cross-Timbers, some washed-out fields replanted. Some areas South Central Texas need rain, many producers dry-planting fields. Rice developing well under hot weather. Condition along the coast was 86% of normal with 85% good and 15% fair. This compares with 93% last year. Many cotton fields replanted soybeans High Plains. Early-planted fields along coast need rain, seeding operations slowed many areas because lack of moisture. Sunflower fields wind damaged during week. Head moths problem scattered stands. Some sugarbeet fields High Plains destroyed by hail. Haying operations slowed by wet weather many areas of State.

Commercial vegetables: Lower Rio Grande Valley, vegetables move market fair volume. Citrus good progress, grove irrigation active. Coastal Bend, watermelon harvest slowed because weak markets. San Antonio-Winter Garden, harvest onions, cucumbers, watermelons active. Cabbage harvest complete some areas. Trans-Pecos, some cantaloup fields hail damage third time. Cabbage, potato harvest gained momentum in El Paso County. Plains, some onion stands destroyed by hail. Other fields severely bruised, waterlogged. Some potato fields minor hail damage. Peaches Low Plains some hail damage. Grasshoppers problem orchards Hill Country. Normal "summer drop" underway many pecan trees across State.

UTAH: Recurring periods widely scattered shower and thunderstorm activity. Accumulated amounts moisture generally light to moderate but locally heavy few localities. Average temperatures ranged from 2° below normal to 5° above. Pan evaporation accumulations ranged from 1.89 to 2.65 in.

Cultivation of row crops. Hay harvest and irrigation major field activities. Winter wheat mostly headed out, some turning color. Harvest in progress extreme southern areas. Warmer weather accelerated spring grain progress, need more. Still behind normal in development. Some damage to first crop hay down in local thundershowers. Statewide harvest 72% completed. Grain and silage corn approaching 10 in. in height, much behind the "knee high by July 4th" goal. Soil moisture loss to summer breezes on range land areas much higher than replaced by local thundershowers.

VIRGINIA: Week began and ended humid and warm; clear, cool, drier mid period. Rain fell in the east and south; averaged 0.30 in. Temperatur continued below normal; average departure minus 4°.

The prolonged damp weather has provided conditions favorable to disease development and root rot in some field crops and vegetables. However, conditions improved during the week and topsoil moisture rated 11% short, 82% adequate and only 7% surplus. Days suitable for fieldwork: 5.1. Hay making was very active and second cuttings of alfalfa and grass hay much improved. Corn rated excellent and 10% was silked, 9% 1981. Soybeans rated good to excellent, 70% seeded, 89% last year, 76% average. Tobacco, pasture and livestock rated excellent. Tobacco cultivation active, some reaching lay-by. Peanuts rated good to excellent. Small grain harvest very active: wheat 41% finished, 56% 1981, 38% average. Oats 36% complete, 30% 1981, average 27%. Barley 77% combined, 84% 1981, 69% average.

WASHINGTON: A low pressure trough, extending from from the south along the coast, produced an easterly offshore flow of hot, dry air during the weekend. High pressure over the eastern Pacific strengthened and changed the air flow to onshore by 21st lowering the daytime maximum temperatures by 10°. The cooler but mostly dry air covered the State by 22nd. Eastern sections of the State showed some warming late in the week. Generally, average temperatures were 7 to 10° above normals. The only significant precipitation reported fell as widely scattered showers over eastern areas.

West: Sweet corn, green peas, cucumbers, broccoli, cauliflower, and other early planted vegetables in good condition. Some late plantings in need of moisture. Harvest of lettuce, early green peas, cabbage, and strawberries continue. Size and quality of strawberries excellent. Raspberries and blueberries continue to ripen. Cattle and pastures in mostly good condition. Some pastures showing signs of moisture stress, however. Hay and other feeds in adequate supply. Green chopping, silage cutting, and hay baling continue. Other activities include Christmas tree shearing and flower bulb picking.

East: Wheat and barley in average to below average condition. Dryland areas received weekend rain, helping crop prospects. Dryland grains still need more moisture and continued cool temperatures for any significant improvement. Soil moisture

fair to adequate. Irrigated crops such as corn, potatoes, and dry beans progressing nicely. Frost and second cutting of alfalfa hay continues. Other activities include weed control. Winter wheat headed 98%, 100% 1981, 93% average.

WEST VIRGINIA: Temperatures averaged below normal. High 88°, low 34°. Precipitation well below normal. Range 0.57 in. to none.

Soil moisture adequate. Days worked: 5.2. Main activities: Hay harvesting, gardening, general maintenance. Small grains in fair to good condition. Wheat: 2% pre-headed, 76% headed, 15% ripe, 7% harvested; 81% headed, 13% ripe and 6% harvested in 1981. Barley: 1% pre-headed, 43% headed, 33% ripe and 23% harvested; 54% headed, 28% ripe and 18% harvested in 1981. Oats: 35% pre-headed, 61% headed and 4% ripe; 45% pre-headed, 52% headed, 2% ripe and 1% harvested in 1981. Corn: 98% planted, 95% emerged; 98% and 84% in 1981. Tobacco: Fair condition; 85% set, 83% 1981. Hay: Fair to good condition; 1st cutting 49% complete, 2nd cutting 5% complete; 42% and 10% in 1981. Pasture in good to fair condition. Peaches poor to fair. Apples fair. Gardens fair to good. Hay supplies adequate to short. Other feed supplies adequate.

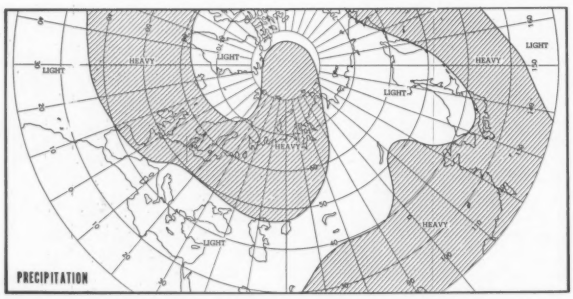
WISCONSIN: Temperatures averaged 6° below normal. Warmer readings were recorded over the weekend. Temperatures ranged from a high of 91° in Lafarge on the 27th to a low of 34° in Morse on the 21st. Showers occurred almost everyday. Rainfall amounts varied greatly with most stations reporting totals in the 0.50 to 1.00 in. range.

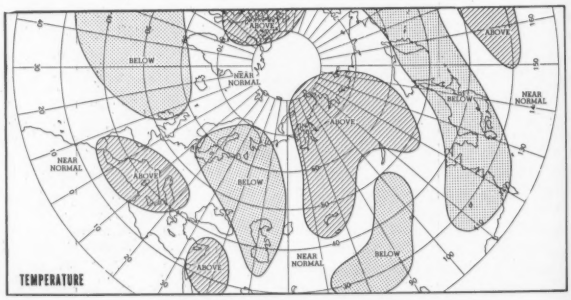
Fieldwork: 5 days suitable. Localized showers and cool temperatures made haying difficult. Currently 75% of the first crop has been harvested, 69% 1981, 61% average. Pastures lush and rated at 89% of normal, 77% 1981, 85% average. Cool June temperatures have slowed corn growth. Average corn height 10 in., 18 in. 1981, 17 in. average. Percent of oats headed also behind schedule. Currently 16% of oats have headed, 53% 1981, 35% average. Early pea harvest got underway, but on an irregular basis. Topsoil moisture supplies were rated 21% short, 76% adequate and 3% surplus. Supplies scarcest in the northwest, rated 57% short. Growing degree day accumulations, since April 1, have averaged 9% below normal.

WYOMING: Only Basins with above normal moisture amounts were Lower Platte, 1.00 in. above, and Powder, Little Mo and Tongue, plus 0.50 in. Central part remained mostly dry. Temperatures in west above normal, in east below normal, with near normal in central parts.

Topsoil moisture adequate 80% State. Subsoil moisture adequate 75% State. Average 5 days suitable fieldwork. Spring wheat headed: 19%; year ago 45%; normal 53%. Oats headed: 10%; year ago 40%; normal 41%. Barley headed: 30%; year ago 55%; normal 59%. Winter wheat headed: 75%; year ago 95%; normal 91%. Winter wheat turning color: 10%; year ago 45%; normal 31%. Sugarbeets thinned: 80%; year ago 95%; normal 95%. First cutting alfalfa 5% complete, normal 40%. Other hay harvest starting, normally 14% complete. Some light hail damage to crops. Ranges, pastures mostly good condition. Stock water adequate most areas.

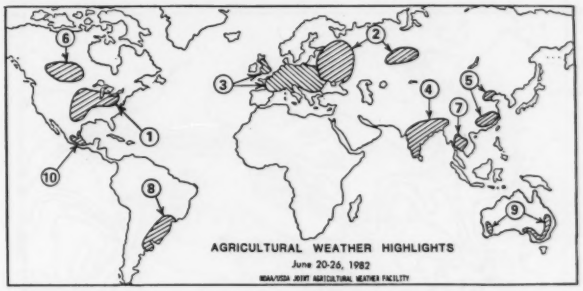
Eurasia Outlook for Mid-July to Mid-August





International Weather and Crop Summary

June 20-26



1. UNITED STATES: Crops progress slowly in the Corn Belt due to unseasonably cool temperatures. Continued wetness slows wheat harvest and soybean and sorghum planting in the central Plains while hail causes some additional damage to Texas High Plains cotton, wheat, and vegetables.

2. USSR: Showers in European areas benefit crops; temperatures moderate in the New Lands, but dry weather continues over many spring grain areas.

3. EUROPE: Showers favor crop growth in west and northern areas; hot, dry conditions stress crops grown in the southeast.

4. SOUTH ASIA: Summer monsoon advance slows; heavy rains behind it benefit planting.

5. EASTERN ASIA: Floods threaten crops in the Yangtze Valley; additional beneficial rain falls in Hebei.

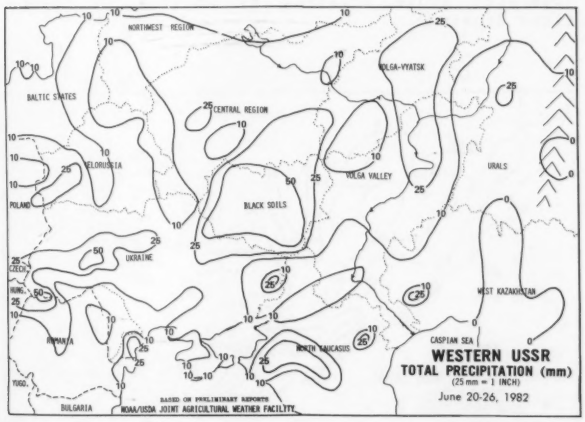
6. CANADA: Favorable weather for vegetative growth of wheat and other crops.

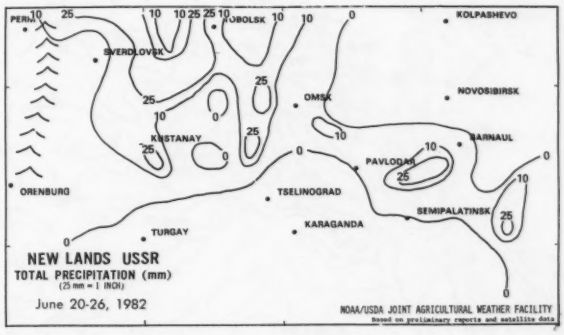
7. SOUTHEAST ASIA: Rainfall pattern variable, but most corn areas benefit.

8. SOUTH AMERICA: Locally heavy rain interrupts coffee harvest; beneficial showers in wheat areas.

9. AUSTRALIA: Still too dry for wheat emergence in east; beneficial showers in west.

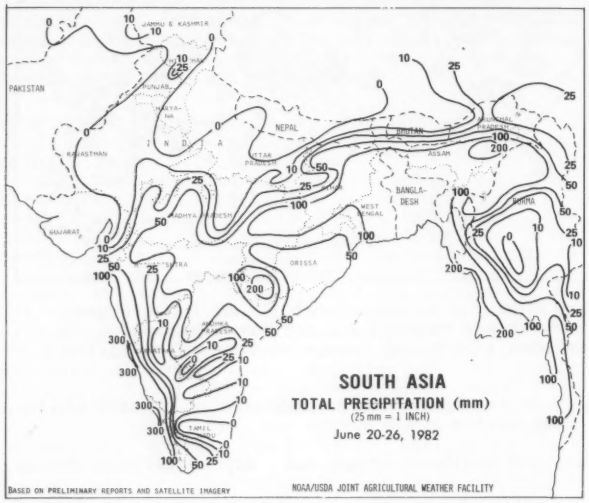
10. MEXICO: Major agricultural areas continue generally dry, helpful to mature and irrigated crops but stressing others.



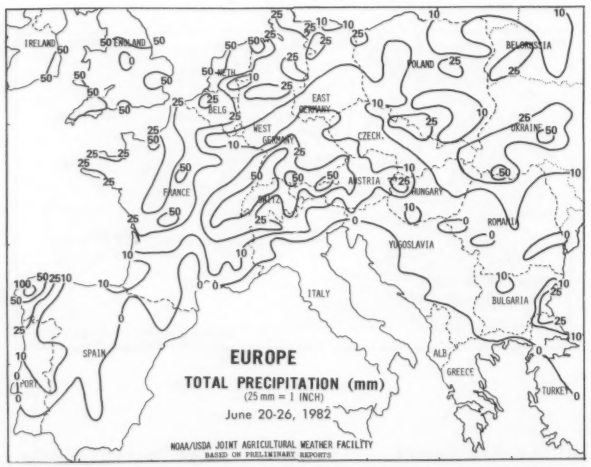


USSR: Widespread shower activity occurred over many areas during the week. Rain continued over northern crop areas of European USSR benefiting spring grains. Showers also fell in a band from the western Ukraine, northeastward into the Black Soils. Rainfall greater than 50 mm fell on the Black Soils region and local flooding may have resulted. Overall, crops grown in these areas benefited from the rainfall. In contrast, light precipitation fell from the eastern Ukraine, northeastward into the Urals. Weekly temperatures continued below normal over western European USSR, slowing the development of spring crops, particularly corn. Temperatures over eastern European USSR were near seasonal for the week.

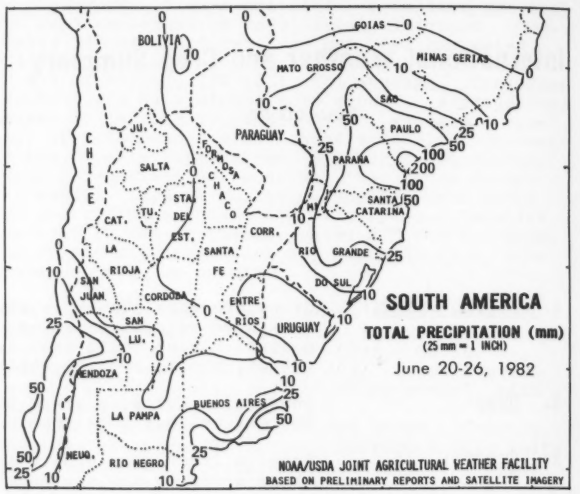
In the New Lands, a frontal system moved slowly eastward across the region, bringing some relief from the hot, dry weather of the previous week. The frontal system weakened as it moved eastward, bringing scattered showers to western and northern spring grain areas, but little, if any, precipitation fell on central and eastern areas. Temperatures dropped to more seasonal levels in the west but were still quite warm, especially in crop areas around Omsk, Pavlodar, and Semipalatinsk. The mostly dry weather of past weeks caused spotty seed germination, particularly in areas east of Kustanay. The crop which emerged is now in the jointing stage. Rain is needed soon in all areas as the crop enters the critical reproductive growth stages.


SOUTH ASIA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
June 20-26, 1982
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

SOUTH ASIA: Above-normal rain fell over Bangladesh and most of the southeastern two-thirds of India. Moisture conditions in these areas are quite favorable for planting crops. However, the summer monsoon advanced very little during the past week, and its arrival in Gujarat and most of Uttar Pradesh is now about a week to 10 days late. This tardiness means that planting in these areas will be delayed, with no potential yield losses as yet. Soil moisture in Uttar Pradesh should be near normal because of generous premonsoon showers in recent weeks and abnormally heavy rains in mid-May.



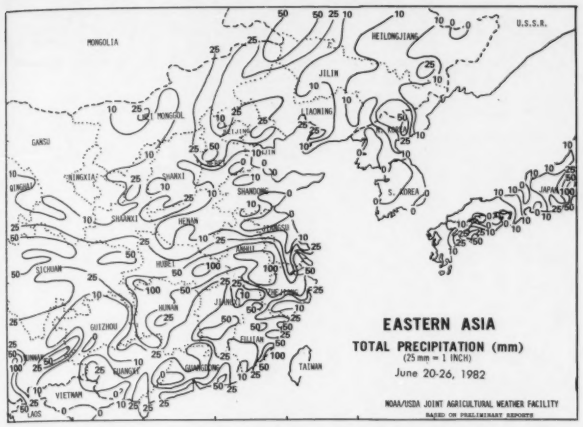
EUROPE: A series of eastward moving storm systems produced showers from England and France, through East Germany into Poland. The precipitation in these areas benefited both winter and spring sown crops. In contrast, a high pressure area remained stationary over southeastern Europe causing the storm systems to dissipate as they moved into the area. As a result, the weather was hot and dry at many locations in Italy, Yugoslavia and southern Romania. Highest temperatures near 35°C were reported at many locations by week's end. As a result of the hot, dry weather, crop stress likely occurred. Weekly temperatures for western Europe were generally below normal.


SOUTH AMERICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
June 20-26, 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

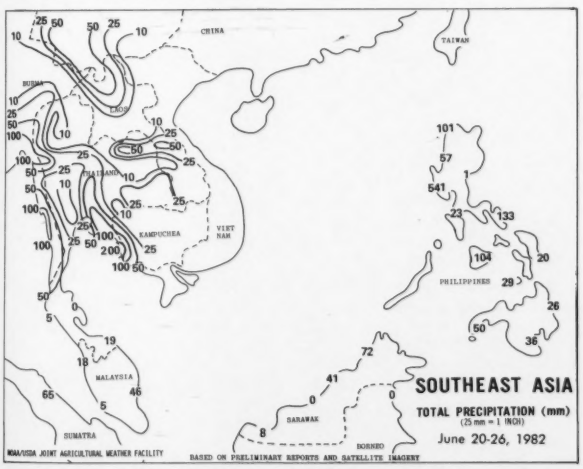
SOUTH AMERICA: Widespread showers produced locally heavy rain in southern Brazil. The heaviest rain fell to the east of the coffee areas of Parana and Sao Paulo, but substantial amounts (greater than 50 mm) caused coffee harvest delays in those states. High winds and hail were also reported in Parana. Weekly rainfall totals were much less in more northern coffee and citrus areas of Sao Paulo and Minas Gerais. Showers also occurred over wheat areas of Rio Grande do Sul causing further planting delays due to persistent wet weather for the past 3 weeks. The Argentine wheat area of southern Buenos Aires also benefited from showers which aided moisture reserves during the slow growth period. Minimum temperatures reached subfreezing early in the week but moderated above freezing by midweek in Buenos Aires Province.

MEXICO
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
June 20-26, 1982
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

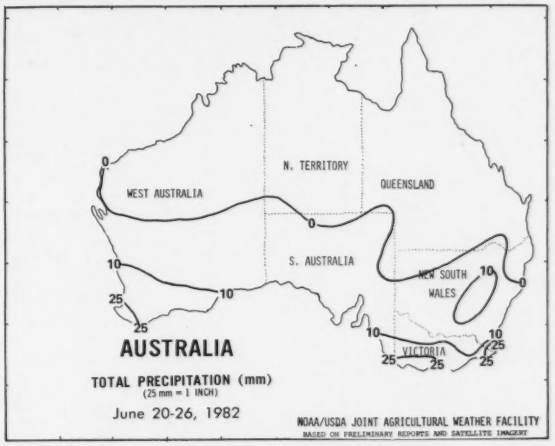
MEXICO: Major agricultural areas continued generally dry, which was helpful to mature and irrigated crops but stressed others. Unseasonably dry weather over the northeast favored harvesting of grain sorghum and early corn while citrus and sugarcane began to suffer from the dryness. A few insufficient showers dotted the southern Plateau cornbelt. Cotton, soybeans, and other irrigated crops in the north-central and northwestern regions should have progressed well under seasonal hot, sunny weather.



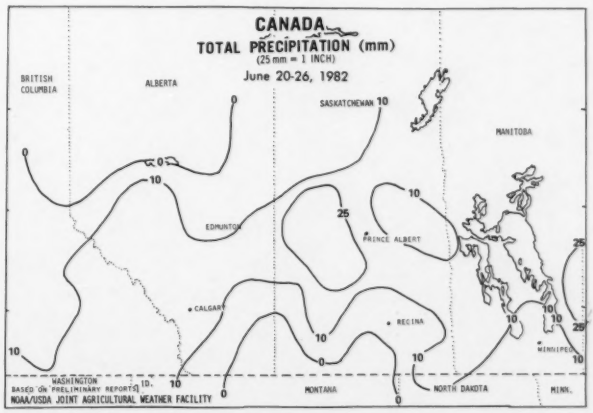
EASTERN ASIA: Rainfall slackened somewhat in southern portions of China's Yangtze Valley. However, totals for the week remained above normal, falling mostly in the first half. Flooding should be the most widespread in the lower reaches of the Valley. The rains likely left water standing in cotton fields in Hubei. Below-normal rainfall along most of the southern coast favored maturing early rice, but parts of the North China Plain remained too dry. Much of Hebei benefited from a second consecutive week of above-normal rainfall. Overall, growing conditions on the North China Plain have improved during the past 4 weeks. Rainfall increased in the Manchurian Valley, but totals for the week were below normal for all but the southernmost parts. Conditions remained too dry for soybeans and spring wheat. In South Korea, little or no rain fell over most major rice areas. Irrigation supplies are reportedly low, and conditions have become unfavorably dry.



SOUTHEAST ASIA: A variable rainfall pattern persisted over Thailand. Most of the major corn area benefited from above-normal rains late in the week, while parts of the east remained detrimentally dry. Corn crop prospects were substantially improved by the moisture. Much of northern Thailand had only light rainfall for a second consecutive week. Reservoirs will need replenishing before summer's end, but water supplies should be adequate for current crop needs on the Central Plains. Satellite imagery indicated that rainfall in Kampuchea and Vietnam was greater than in Thailand.



AUSTRALIA: Some extremely beneficial rain fell over limited crop areas of New South Wales early in the week, but dry weather for the remainder of the week over eastern crop areas continued to hamper wheat planting and early development. Well-below-average rainfall since March in eastern crop areas is posing a serious problem for the wheat crop. Planting can take place through the end of July, but yield prospects likely will diminish because of the unfavorable start. Insufficient moisture during planting will not only retard emergence due to seedling dehydration but also make it necessary for ideal growth conditions later in the crop cycle to compensate, at least partially, for the poor start. Western Australia, producing about 30 percent of the wheat crop, received additional moisture during the week which will benefit vegetative growth.



CANADA: Cool, moist weather during vegetative growth and warm, dry weather during grain formation are generally ideal for wheat. Weather conditions thus far in the growing season have favored good crop development during early growth stages. Most crop areas received some additional moisture during the week from well-distributed shower activity. Only extreme southern Saskatchewan and southeastern Alberta remained dry for the week. Temperatures were generally favorable for crop growth, although the crop still lagged behind last year's development by a week to 10 days. Yield prospects remain good, but the cool, wet spring has promoted vigorous weed growth and increased the potential for rust disease.

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National Weather Summary (cont. from first page)

THURSDAY...Thunderstorms peppered the central and southern Plains as well as from Nebraska to the western Great Lakes. Showers moved into the Pacific Northwest and spread to the central Plateau. Severe weather from north-central Texas through Oklahoma produced large hail and tornadoes. A few showers lingered over New England, but heavy storms covered Florida. Temperatures reached to the eighties from Nebraska to southern Wisconsin and rose to the nineties in Washington. Cool weather covered the northern Plains and Northeast.

FRIDAY...The Mississippi River Valley bore the brunt of thunderstorms. Heavy rain accompanied storms from Louisiana and northern Mississippi to Missouri and Illinois. Afternoon thunderstorms continued to develop through Texas and the eastern slopes of the Rockies. Storms reached severe proportions in eastern Colorado and western Kansas and Nebraska. Light showers reached through Washington to the Northern Rockies. Light showers reached from the eastern Great Lakes to southern New England. Warm temperatures blanketed the West--even some of the normally cool coastal areas.

SATURDAY...Early-morning cool temperatures covered the Great Lakes region. The temperature dropped into the thirties to set records over the northern Lakes. Warm temperatures blanketed most of the Nation by midafternoon. Thunderstorms covered the central Plains and south to central Texas, eastward to West Virginia, and to South Carolina, Georgia, and northern Florida. Showers continued from New York to southern New England and over the Pacific Northwest.

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